DMEA Form 9
Rev. 6/57

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE — Idm-E NO. 793 — DMEA NO. 3478

Application
- [ ] Denied
- [ ] Withdrawn

Contract
- [ ] Terminated - Not Certified
- [x] Terminated - Certified
- [ ] Cancelled
- [ ] Royalty Agreement

The records contained in this file are marked (x) and arranged in this order:

Folder No. 1:

Left Side

- [✓] Royalty Audits 5/22/59, 6/11/62
- [x] Certification of Discovery
- [ ] Closing Letter
- [x] Cost Audits
- [ ] Termination Notice or Agreement
- [ ] Recision Notice
- [ ] Assignment of Contract
- [x] Contract Amendments
- [x] Contract with all exhibits and annexes
- [x] Owner's Consent to Lien and Subordination Agreement
- [x] Application and attachments

Right Side

- [x] Project summary (final)
- [ ] Work Comoleted analysis (final)

All other material filed in chronological order including the following reports if checked:

- [x] Field Team Semi-Annual Report for Certified Project
- [x] Final Field Team Report (Tab)
- [x] Operator's Final Report (Tab)
- [x] Interim Field Team Reports
- [x] Operator's monthly reports and all attachments
- [x] On-site Exam Report (Tab)
- [ ] Settlement Sheets
- [ ] Drill Logs

Additional Folders:

Left Side

Folders No. _____ : Reports
- [ ] Analysis of Semi-Annual Inspection Reports
- [ ] Project Summary (Interim) by DMEA Engineers

Right Side

- [ ] Field Team Semi-Annual Report for Certified Project
- [ ] Field Team Interim Reports
- [ ] Operator's Monthly Reports with transmittal, narrative and maps.

Folders No. _____ : Maps (Use pocket folder or envelope)

Folders No. _____ : Settlement Sheets

Folders No. _____ : Drill Logs

Folders No. _____ : Royalty material

(ers

17963

MME FORM 6 REFERENCE SLIP

REV. 2-59 OFFICE OF MINERALS EXPLORATION

TO:	DATE	INITIALS
1. Mr. Fumich	6/11	[illegible]
2. ~~Mr. Johnson~~	6/11	[illegible]
3. Mr. Selfridge		
4. Mr. ~~Griswold~~ ~~Mr. Hall~~	6/12	S.P.H.
5. ~~Mr. Johnson~~ 220		
FROM: E. D. Talbert	6/11	

FOR: Check items for action desired

____ Action ____ Reply for signature of ____

____ Approval ____ Investigate ____ Surname

____ Comment ____ Recommendations ____ Signature

____ Conference ____ Rewrite ____ File

____ Instructions ____ Your information

REMARKS:

Why not ask Bush about the 40 Tons of ore?

[illegible]

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

OFFICE OF MINERALS EXPLORATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF ROYALTY REVIEW

I have reviewed the files of the Washington office pertaining to Contract Idm-3793, Docket DMEA-3478 (manganese), dated April 28, 1955, with

William L. Petersen, R. A. Lowe, William V. Bush,
and William H. Campbell
Austin, Nevada

for the purpose of determining the amount of royalty payable to the U. S. Government on sales of minerals from property referred to as the Last Chance Mine located in Lander County, Nevada, during the period January 1, 1959, through May 25, 1962.

A certification of discovery or development was issued on November 23, 1956, and, in accordance with Article 7 of the contract, royalty is payable on all minerals produced from the land described in Article 2 of the contract for a period of 10 years from the date of the contract or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first. A Report of Review dated June 11, 1956, indicated accepted costs under the exploration contract amounting to $6,543.00 with the Government's contribution on a 75 percent basis being $4,938.00.

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

This review established no sales subject to the Government's royalty subsequent to the period covered by a prior Report of Royalty Review which also found no sales subject to the Government's royalty through December 31, 1958. The royalty account as of December 31, 1958, was:

Total Royalty Payable	$ -0-
Total Royalty Paid	-0-
Balance of Royalty Due	$ -0-

As of May 25, 1962, the royalty account of this project was found to be:

Total Royalty Payable	$ -0-
Total Royalty Paid	-0-
Balance of Royalty Due	$ -0-

June 11, 1962

E. D. Palbert, OME Auditor

Idm-8793 Petersen, Lowe, Bush, & Campbell DMEA-3478

STATUS OF PROJECT, SCOPE OF REVIEW
AND REASONS THEREFOR

This contract provides that the Operators, as principal if the producer or as surety if not the producer, shall pay to the Government a percentage royalty on all mineral production from the Last Chance Nos. 1 and 2 unpatented lode mining claims in the Reese River Mining District. At the time this contract was executed, a one-half undivided interest in the two claims was owned by three of the partners, Lowe, Bush, and Campbell. The other one-half undivided interest was held by Jack Stoner, Battle Mountain, Nevada, who executed an Owner's Consent to Lien on October 10, 1954. The claims had originally been staked in 1936 by Petersen and Stoner, but Petersen sold his half interest to Lowe, Bush, and Campbell in 1953.

The exploration work under the contract was completed in May 1956. Some ore produced during the exploratory trenching and test-pitting was stockpiled at the Operator's small mill at Warm Springs. About 40 tons of manganese concentrates produced from one of the trenches also was stockpiled at the mill.

Form 63 Signed by Wm. Bush May 25, 1962 leaves blank the spaces for ore or concentrate stored

The property remained inactive after completion of the exploration work. The Warm Springs mill was dismantled and moved during 1957.

As a result of court order in a divorce action Jack Stoner's one-half interest in the property was transferred to Maude Stoner on October 27, 1955. The files indicate that the claims may have been leased to the Nevada Ore Refining Co., Reno, Nevada, during 1960. However, one of the partners (Wm. F. Bush) in the Operator-Partnership advised in a May 25, 1962, reply to MMB Form 63 inquiry that neither production nor change in possessory status has occurred since January 1, 1958.

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

(1) The files contain no evidence of sales of production from the property under the contract during the period covered by this review; and
(2) The administrative cost to the Government of an on-site royalty audit at this time would be excessive in relation to the amount of possible royalty which might be disclosed.

OFFICE OF MINERALS EXPLORATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF ROYALTY REVIEW

I have reviewed the files and records of the OME Field Team, Region II, pertaining to Contract No. Idm-E793, Docket No. IMEA-3478 (Manganese), dated April 28, 1955, including Amendment No. 1, with

Peterson, Lowe, Bush and Campbell
Austin, Nevada

for the purpose of determining the amount of royalties due the U. S. Government on sales of Manganese ore from property known as the Last Chance Mine, located in Bander County, Nevada, during the period April 28, 1955 to December 31, 1958.

A certification of discovery or development was issued on November 23, 1956 and accordingly royalty is payable on all production from the land described in Article 2 and Annex I of the contract, for a maximum period of 10 years from date of contract. A Report of Review dated June 11, 1956, indicated acceptable costs under the exploration contract amounted to $6,648.00 with the Government's contribution on a 75 percent basis being $4,986.00.

No royalties have been paid to date in connection with this contract.

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

(a) According to the Field Team's Semi-Annual Report of Certified Projects for the period July 1, 1958 to December 31, 1958, there was no production during the period covered by this review.

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

May 22, 1959

George Mayor
George Mayor, OME Auditor

DOCKET
SURNAME
Holt
Martin
Butin
Sawyer
Appd. Solicitor
Falkner
Lamb
Kalgaard
Selfridge
Johnson

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

400

CERTIFICATION BY THE UNITED STATES OF AMERICA
OF A DISCOVERY OR DEVELOPMENT UNDER
AN EXPLORATION PROJECT CONTRACT

To: Petersen, Lowe, Bush and Campbell
Austin, Nevada

Pursuant to the provisions of Exploration Project Contract No. Idm-K793, executed April 28, 1955, (Docket No. DMEA 3478), as amended, hereinafter called the "Contract", between William L. Petersen, R. A. Lowe, William V. Bush and William H. Campbell, partners, and the United States of America, hereinafter called the "Government"; to establish and fix the Government's percentage royalty and its lien therefor and on the land described in the contract, the Government considers and therefore certifies that a discovery or development from which production may be made has resulted from the exploration.

The nature of said discovery or development is described broadly or indicated as follows:

Trenching and test-pitting on the Last Chance claims have indicated a substantial quantity of manganese oxides, occurring in layers and pods that generally follow the bedding planes of shale which lies between beds of chert.

THE UNITED STATES OF AMERICA

By C O Mattesson
Administrator, Defense Minerals
Exploration Administration

Dated: November 23, 1956

SPHolt:foc 11/15/56
cc to: Docket
Code 400 (2)
Code 110
Code 800
Oper. Comm.
Admr. R. File
Gilbert DeHuff, USBM
Thor H. Kiilsgaard, USGS
F. D. Lamb, USBM
FT. REG. II (2)

cc to: Finance Officer
Petersen, Lowe, Bush & Campbell
Jack Stoner, Battle Mt., Nev.
Clarence A. Fredell, GSA

400

DEFENSE MINERALS EXPLORATION ADMINISTRATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

RECEIVED
JUN 15 1956

DMEA-3478

REPORT OF REVIEW

I have reviewed the Monthly Reports of:

William L. Peterson, R. A. Lowe, William V. Bush,
and William H. Campbell, partners,
Austin, Nevada

pertaining to Exploration Project Contract No. 1Am-3793, Docket No. DMEA-3478, including Amendment No. 1, for the month of September 1955 and the month of May 1956, covering a project for the exploration of Manganese, on property, known as the Last Chance Mine, located in Lander County, Nevada.

My review included an examination of the Monthly Reports (Forms MP-104) and supporting documents attached thereto, comparison of the costs claimed with the contract and pertinent schedules, consultation with Executive Officer in charge of the project, and a determination of the reasonableness and propriety of the costs.

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

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

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

Total cost as billed by Contractor		$6,700.00
Exceptions (schedule attached):		
By DMEA Finance Officer	$ -0-	
Herewith	32.00	32.00
Total Accepted Cost		$6,668.00

The contract calls for a 75% participation of exploration expenses by the United States Government. Therefore, payment to the contractor by the Government in the amount of Four Thousand Nine Hundred Eighty Six and 00/100 Dollars:

** $4,986.00 **

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

George Mayer
George Mayer
Auditor

June 11, 1956

RECEIVED
JUN 15 1956

SCHEDULE OF EXCEPTIONS

Peterson, Lowe, Bush and Campbell — NMEA-3478 — Idm-2793

Amount claimed by Operator MF-104 May 1956	
Assaying, 25 samples at $4.00 each	$100.00
Less: Actual samples assayed as per Nevada Mineral Laboratories Assay Certificate dated 11-10-55 12 samples at $4.00 each	48.00
Amount of Exception	$ 52.00

Note: When operator submitted the first MF-104 for September 1955, the sum of $100.00 for assaying was included. As the assay work had not been performed, a request was made to submit a revised MF-104 for September 1955, excluding the cost of $100.00 for assaying. The operator submitted the revised MF-104 which was paid, however when submitting the MF-104 for May 1956, the operator included in error, under "Totals Previously Reported" the assay cost of $100.00. The correct amount was 12 samples at $4.00 each or an allowable cost of $48.00 as per Henry A. Jones, Examining Engineer and S. Richer, Executive Officer, Region II.

Docket Copy

Porter
Sluyer
"Appd. Sol. Off."
Chapman
Martin
Talbut
Kilgoard
Keehan
Selfridge
Johnson

AMENDMENT NO. 1
to
EXPLORATION PROJECT CONTRACT Idm-#793
Dated April 28, 1955
DOCKET NO. DMEA-3478
between
THE UNITED STATES OF AMERICA
and
PETERSON, LOWE, BUSH & CAMPBELL

It is agreed this 27th day of January, 1956 that the Contract is amended as follows:

(1) Work under this Contract shall be suspended during the period beginning October 20, 1955, and ending not later than April 30, 1956.

(2) The Government shall not contribute to any costs incurred by the Operator during the period of suspension or to any costs of rehabilitation or repair which, in its opinion, would not have occurred if there had been no suspension of the work.

(3) The Operator, at its own cost and expense, without contribution by the Government, during the period of suspension shall preserve and protect the project work.

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate amount which the Government may be required to contribute, nor the fixed unit cost of any item of work.

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

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

William V. Bush (Partner)

[illegible] (Partner)

W. P. Peterson (Partner)

William H. Campbell (Partner)

Docket copy

MF-200A
(Revised June 1954)

Docket No. DMEA-3475

Commodity Manganese

Contract No. Idm-E 793

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

It is agreed this 28th day of April, 195 5, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and [2] William L. Petersen, R. A. Lowe, William V. Bush, and William H. Campbell, partners,

whose mailing address is Austin, Nevada,

hereinafter called the "Operator," as follows:

ARTICLE 1. *This contract* is entered into under the authority of the Defense Production Act of 1950, as amended. It consists of this form (MF-200A), the attached Exhibit "A," Annex I, and

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

ARTICLE 2. *Operator's property rights.*—(a) The land which is the subject of this contract (hereinafter called "the land") is in the State of Nevada, County of Lander, and is described in Annex I.[3]

(b) The Operator represents and undertakes that:

(1) The Operator is the [4] See Annex I of [5] See Annex I in the land, in possession and entitled to possession for all of the purposes of this contract, under and by virtue of a [6] See Annex I, [7] recorded in Book , page , official records of said County; and

(2) The Operator's right, title, or interest (whether as owner, lessee, or otherwise) is subject only to the following claims, liens, or encumbrances: See Annex I

(c) The Subordination Agreement of the holder of any claim, lien, or encumbrance listed above, and (if the Operator does not hold the legal title) the Consent to Lien of any holder of the legal title of the land (lessor, seller, optionor, etc.), are attached, as follows: Owner's Consent to Lien

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

16—70618-1

(d) The Operator shall preserve and maintain his right, title, and interest in the land and his right to the possession thereof for the purposes of this contract, and shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of this contract. Until the lapse of the time within which the Government may make a certification of discovery or development without any such certification having been made, and after any such certification has been made, the Operator shall neither transfer, convey, nor surrender the land nor any right, title, or interest therein, nor permit nor suffer any claim, lien, or encumbrance thereon, without expressly referring to and providing in the instrument of conveyance, lien, or encumbrance for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof. If the Government makes no certification of discovery or development within the time limited in Article 7, it shall thereafter have no claim against the land or any production therefrom except for any production referred to in Article 7(b)(1).

ARTICLE 3. *The exploration project.*—The project is a search for indicated or undeveloped deposits of Manganese. The work to be performed is described in Exhibit "A." The Operator on or before JULY 1, 1955 shall commence the work, and on or before July 1, 1956 (unless the Operator's obligation to complete the work is terminated—see Article 8) shall complete the work.

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

(b) *Government may inspect.*—The Operator shall consult with and inform the Government on all phases of the work as it progresses. The Government may enter at all reasonable times to inspect the work under the contract, and also after a certification of discovery or development to inspect production operations and underground workings. The operator shall provide the Government with all reasonable means of access for such inspections.

ARTICLE 5. *Contribution by the Government.*—A fixed cost for each unit of work to be performed (per foot of drifting, per foot of drilling, per hour of operations, etc.) is hereby agreed upon, and is set forth in Exhibit "A" in connection with the estimated total cost of the project in the sum of $10,155.00. The Government will contribute 75 percent of the fixed unit costs as work is performed, in a total sum not in excess of $7,616.25: *Provided,* That until the Operator has rendered to the Government his final report, and any final auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of 10 percent of the estimated total cost of the work. The Government will make its contribution on the basis of the monthly vouchers referred to in Article 6(b), but all payments by the Government are provisional only, subject to audit, until the account between the Operator and the Government is finally audited and settled. To the extent that excesses over fixed unit costs or any excess over the estimated total cost may be necessary for the performance of the work, the Operator shall incur and pay such excesses for his own account without contribution by the Government. The Government may make payments directly to independent contractors and suppliers for the account of the Operator rather than to the Operator.

ARTICLE 6. *Reports, accounts, audits.*—(a) *Operator's records.*—The Operator shall keep suitable records and accounts of the units of work performed and of any production in which the Government may have an interest; and shall preserve those with respect to work performed for at least three years after final payment by the Government, and those with respect to production for at least three years after any obligation to pay royalties to the Government has terminated. The Government may inspect and audit said records and accounts at any time, either by itself or by a certified public accountant. The Comptroller General of the United States or his representative, until the expiration of said three-year periods, shall have access to and the right to examine any pertinent books, documents, papers, and records of the Operator. All of the Operator's vouchers and records and accounts relating thereto and the Government's payments thereof remain subject to adjustment until final audit by the Government.

(b) *Progress reports and vouchers.*—The Operator shall provide the Government with five copies of monthly progress reports in three sections as follows: (1) Operator's Monthly Report and Voucher showing a detailed statement of units of work performed during the reporting period; (2) Operator's Unit Cost and Progress Report showing the various types of work performed during the reporting period and the fixed unit costs incurred for each type of work; and (3) a Narrative Report of the work

performed during the reporting period including adequate engineering-geological maps or sketches, drill hole logs and locations, and assay reports on samples taken concurrently with advance in mineralized ground. (Forms for reporting under (1) and (2) above will be provided by the Government.)

(c) *Final report.*—Upon completion of the work or termination of the Government's obligation to contribute to costs, the Operator shall furnish the Government with five copies of a final report (in addition to the final progress report and voucher). This final report shall include a geological and engineering evaluation of the results of the work performed under the contract with an estimate of the ore reserves resulting from such work, complete assay data, adequate geological and engineering maps or sketches, and a summary of the work performed and the unit costs thereof.

(d) *Report of sales.*—The Operator shall provide the Government with suitable accounting and documentary evidence covering all production to which the Government's percentage royalty relates, such as copies of smelter or concentrator settlement sheets, and certified accounts of production and sale or other disposition of production.

(e) *Compliance with requirements.*—If in the opinion of the Government any of the Operator's reports, records, or accounts are insufficient or incomplete, or if the Operator fails to make them, the Government may procure the making or completion of such with suitable attachments as an expense of the work to which the Operator shall contribute. The Government may withhold approval and payment of any vouchers relating to insufficient or incomplete reports, records or accounts.

ARTICLE 7. *Repayment by Operator.*—(a) *Certification.*—If the Government considers that a discovery or development from which production may be made has resulted from the work, the Government, at any time not later than six months after a sufficient final report and final account (see Article 6) has been rendered, may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development.

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

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

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

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

One and one-half (1½) percent of amounts ("gross proceeds" or "value") not in excess of eight dollars ($8.00) per ton of production in the form in which sold, held, or used, plus one-half (½) percent for each additional full fifty cents ($0.50) by which such amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such amounts.

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

(f) *Time for computation and payment.*—The Government's royalty shall be computed and paid currently upon each lot sold, held, or used in integrated operations, as the case may be, as above provided in this article.

(g) *Lien for payment.*—To secure the payment of its percentage royalty, there is hereby granted to the Government a lien upon the land or the Operator's interest in the land and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

(h) *Notice to purchasers.*—The Operator shall give notice of the Government's claim for royalty to any purchaser of the production, and shall authorize and direct such purchaser to pay the royalty directly to the Government and to furnish the Government with copies of the settlement sheets. If the records of any production and sales or other disposition of production, whether the production is by the Operator or by others, are not made available to the Government, the amount of the royalty may be estimated by the Administrator, Defense Minerals Exploration Administration, or his successor, and his estimate thereof shall be final and binding upon the Operator.

(i) *No obligation to produce.*—Nothing in this contract is to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any production operations.

(j) *Government not obligated to buy.*—Nothing in this contract shall be construed as imposing any obligation on the Government to purchase any minerals mined or produced from the land.

ARTICLE 8. *Termination of the Government's obligations.*—(a) If in the opinion of the Government operations at any time have failed to achieve anticipated results that indicate the probability of making a worthwhile discovery, and in the opinion of the Government further operations are not justified, the Government may give the Operator written notice thereof, and thereupon the Government shall be free of all obligation to pay on account of units of work not then performed, and the Operator shall be free of all further obligation to prosecute the work other than such as may be necessary and incidental to winding up, reporting, and accounting.

(b) If in the opinion of the Government the Operator is in any manner in default under the terms of the contract, the Government may give the Operator written notice of such default with a specification of reasonable time within which the default must be cured; and if the Operator fails to cure such default as required, thereupon the Government shall be relieved of all obligation to pay on account of units of work not performed when the notice was given, and the Operator shall be free of all obligation to prosecute the work other than such as may be necessary and incidental to winding up, reporting, and accounting. The remedy provided for the Government in this paragraph "(b)" is in addition to any other remedy provided in this contract, and in addition to any other remedy the law may provide for breach of contract.

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

ARTICLE 9. *Notices to be given by the Government* may be delivered to the Operator, or may be sent by registered mail addressed to the Operator at his mailing address stated in this contract. If mailed, notices are deemed to have been delivered five days after the date of mailing.

ARTICLE 10. *Officials not to benefit.*—No member of or delegate to Congress or resident commissioner shall be admitted to any share or part of this contract or to any benefit that may arise therefrom; but this provision shall not be construed to extend to this contract if made with a corporation for its general benefit.

ARTICLE 11. *Changes and added provisions.*—

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

Peterson, Lowe, Bush, and Campbell
(Operator)

By Wm. V. Bush (Partner)

By R. A. Lowe (Partner)

By William H. Campbell (Partner)

By W. L. Peterson (Partner)

By C. Mitchell
Administrator, Defense Minerals
Exploration Administration

Butler
Hafford
Chandler
Chapman
Martin

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]

Selfridge
R. G. Nelson

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

EXPLORATION PROJECT CONTRACT
PETERSEN, LOME, BUSH, and CAMPBELL
DOCKET NO. DMEA-3478

ANNEX I

The land referred to in Article 2 of the contract form is described as follows:

Two unpatented lode mining claims located in the Reese River Mining District, Lander County, Nevada, on the east flank of the Desatoya Mountains and about 36 miles northwesterly from the County Seat at Austin. The location notices are recorded in the Court House, as follows:

Claim Name	Book No.	Page No.
Last Chance No. 1	J	279
Last Chance No. 2	J	280

An undivided one-half interest in the land is owned by the Operator, and the remaining interest is owned by Mr. Jack Stoner, Battle Mountain, Nevada, whose "Owner's Consent to Lien" is attached to the contract.

EXPLORATION PROJECT CONTRACT
PETERSEN, LOWE, BUSH, and CAMPBELL
DOCKET NO. DMEA-3478

EXHIBIT "A"

Description of the Work

The work is divided into two successive stages, as follows:

Stage I

Drill, blast and bulldoze seven trenches, approximately in the locations and in the lengths indicated on the accompanying map, Figure 2, entitled "Sketch Map of the Last Chance Workings . . .," attached hereto and made a part hereof. Each trench shall be approximately 10 feet wide, 4 feet deep, and 50 feet long, with a total length of approximately 350 feet. The total excavation shall not exceed 15,000 cubic feet, including entry in and out of trenches.

All trenches shall be sampled where warranted by mineralization and assayed for manganese and silica.

Stage II

If, in the opinion of the Government, the results of Stage I warrant further work, Stage II shall be performed.

In each trench disclosing sufficient mineralization to warrant it, and as approved by the Government, sink a test pit to an approximate depth of 15 feet. These pits shall be not less than 3 feet by 5 feet in rock section, and the total length of all pits shall not exceed 105 feet.

The pits shall be sampled at 5-foot intervals and assayed for manganese and silica.

Fixed Unit Costs

Stage I

15,000 cubic feet of excavation @ $0.35/cu.ft.	$ 5,250.00
Assaying, 25 samples @ $4.00/ea.	100.00
Estimated Total Cost of Stage I	$ 5,350.00

Stage II

105 feet of pits @ $45.00/ft.	$ 4,725.00	
Assaying, 20 samples @ $4.00/ea.	80.00	
Estimated Total Cost of Stage II		$ 4,805.00
Estimated Total Cost of Project		$10,155.00
Government Participation @ 75%		$ 7,616.25

DMEA # 3478

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 18 1954

MF-203
(Revised July 1, 1954)

OWNER'S CONSENT TO LIEN

WHEREAS, the undersigned, as owner, co-owner, lessor, or seller has an interest in certain property in the State of Nevada, County of Lander, described as follows:1/

Lode Claims recorded June 17, 1938, Book J, Pages 279 to 280 Records of Lander County Nevada, Reece River Mining District, known as Last Chance No. 1 and No. 2.

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

2/ William L. Peterson, R. A. Lowe, William V. Bush and William H. Campbell, all of Austin, Nevada.

hereinafter called the "Operator"; and

WHEREAS, under the provisions of said contract the Government is entitled to a percentage royalty on production and to other rights and equities which do or may conflict with or be adverse to the rights of the undersigned:

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

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

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

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

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

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

(OVER)

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

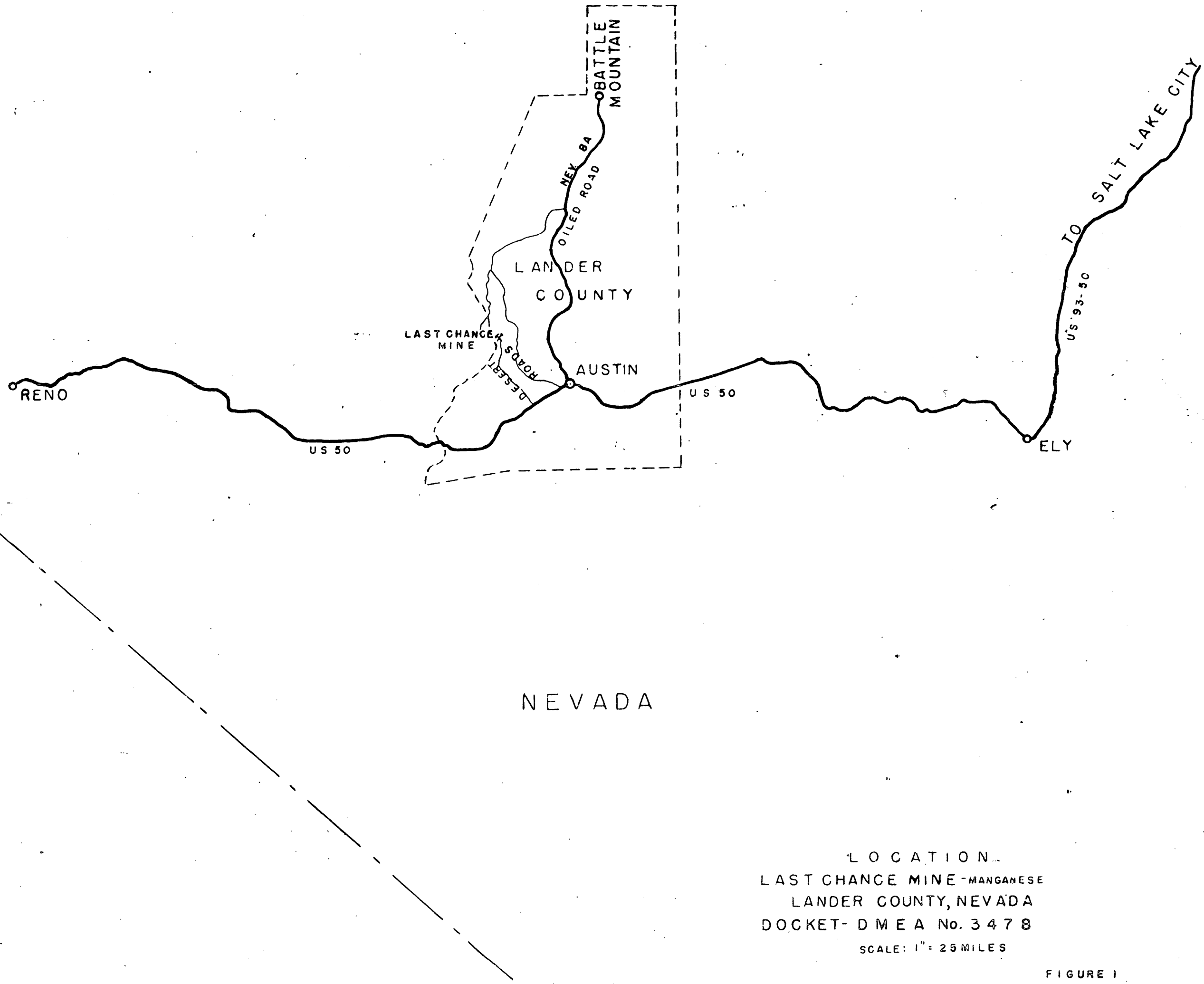
4. Changes and added provisions none

Dated this 10th day of October, 1954.

(x) Jack Stoner [Seal]
Jack Stoner

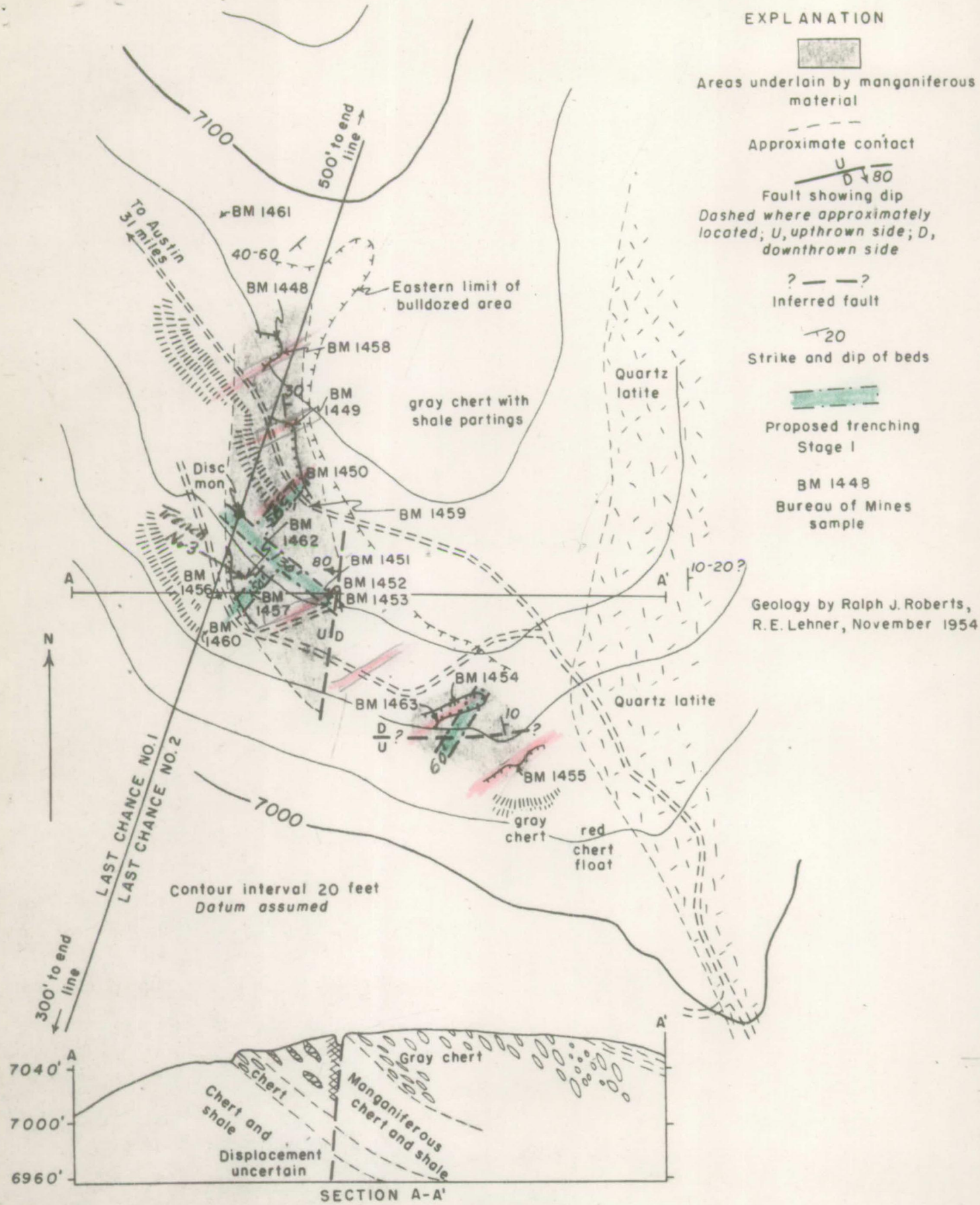
[Seal]

[Seal]



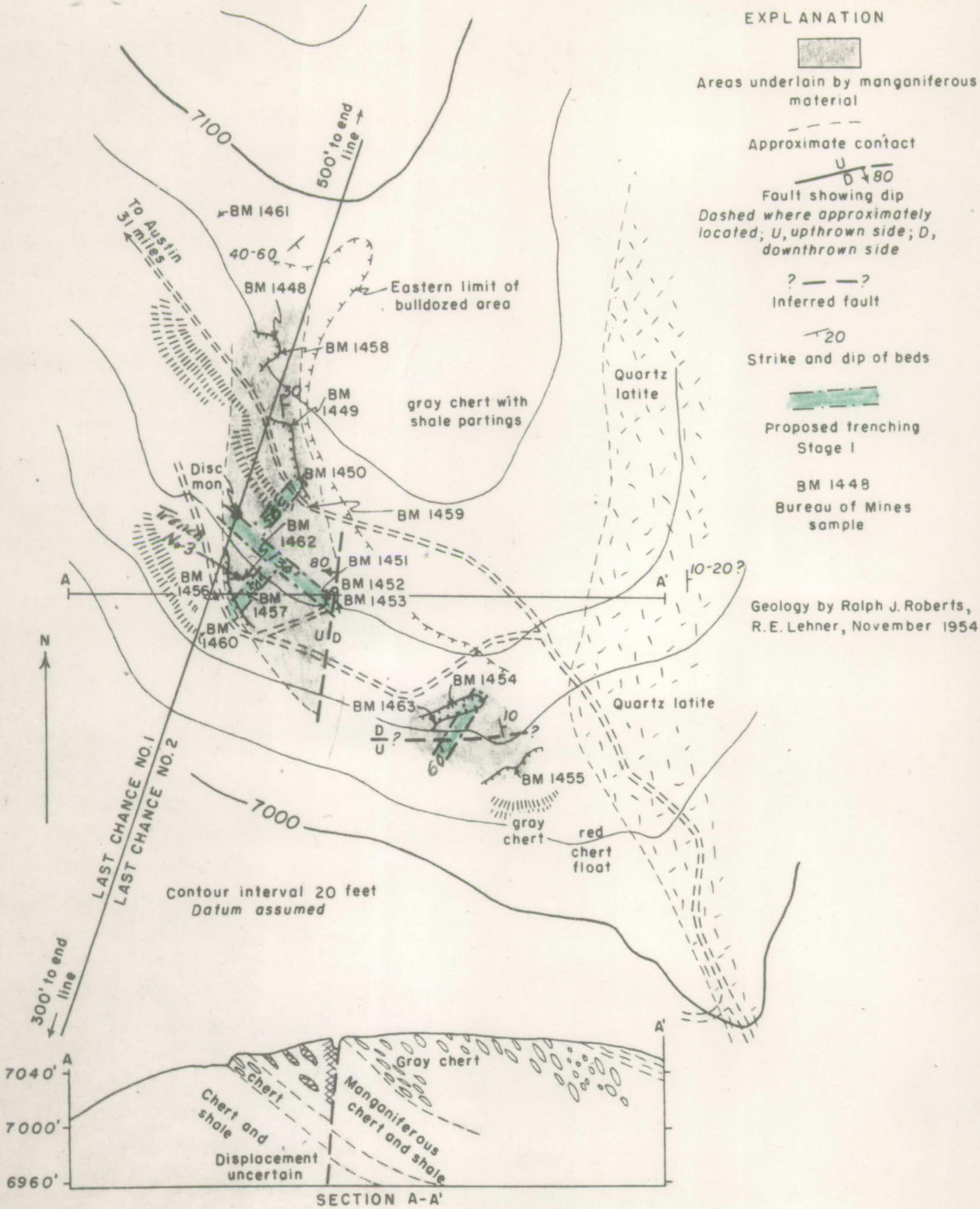
LOCATION
LAST CHANCE MINE - MANGANESE
LANDER COUNTY, NEVADA
DOCKET- DMEA No. 3478
SCALE: 1" = 25 MILES

FIGURE 1



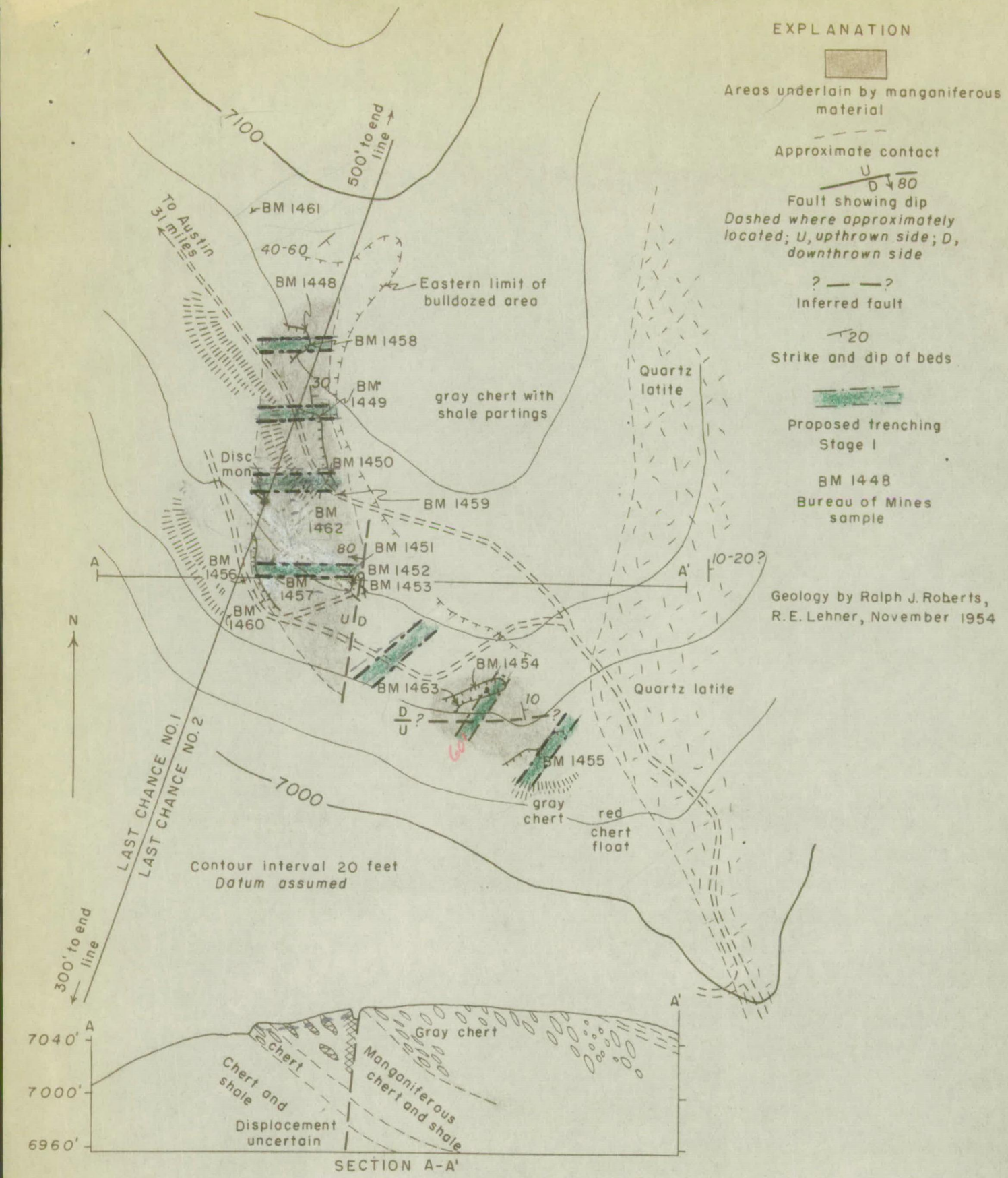
SKETCH MAP OF THE LAST CHANCE WORKINGS, NEW PASS RANGE, NEVADA

FIGURE 2



SKETCH MAP OF THE LAST CHANCE WORKINGS, NEW PASS RANGE, NEVADA

FIGURE 2



SKETCH MAP OF THE LAST CHANCE WORKINGS, NEW PASS RANGE, NEVADA

FIGURE 2

UNITED STAT

D. M. E. A.

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

420 Custom House
555 Battery Street
San Francisco 11, Calif.

August 31, 1954

Memorandum

To: Defense Minerals Exploration Administration
Interior Building, Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region III

Subject: Application Forms MF-103 - Manganese
William L. Petersen et al.
Austin, Nevada

Attached are three sets of MF-103 forms received in our mail from William L. Petersen, making application for a loan on the Last Chance Mine in Lander County, Nevada. The fourth set has been retained for our records.

S. Ricker for
H. C. Miller
Executive Officer
DMEA Field Team, Region III

Attachment

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

SEP - 8 1954

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. 3478
Metal or Mineral Manganese
Date Received
Estimated Cost $72,580
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:
Last Chance Mine -
William L. Petersen, R. A. Lowe, William V. Bush and
William H. Campbell all of Austin, Nevada

(*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 Lode mining claims, recorded June 17, 1938 in Book J of Mining Locations, Page 279 and 280, Records of Lander County, Nevada - Reese River Mining District

(*b*) State any mine name by which the property is known. Last Chance #1 and Last Chance #2

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise We own and undivided one-half interest and have written authorization to encumber other half, ATTACHED HERETO

(*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.

(*e*) If you own the land, describe any liens or encumbrances on it none

(*f*) If the land consists of unpatented claims, add to the description above, the book and page numbers for each recorded location notice. Lode Claims recorded June 17, 1938 Book J Pages 279 - 280 Records of Lander County, Nevada Reese River Mining District

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 Manganese

(*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 5 days weather permitting and be completed within 12 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 August 24th, 1954

Last Chance Mine
(Applicant)

By

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

4. Physical Description.
(a) Several thousand yards of overburden have been removed exposing numerous promising ore contacts near the top of the deposits. All work to date has been done by applicants. Have drilled 1200 feet of blast holes. Examiners can drive directly to the mine site over good roads.
(b) Have removed approximately 50 tons of high grade shipping ore and about 500 tons of mill ore, assays of which show 27% to 45% Manganese.
(c) See sketch attached. Property is located on a rounded ridge. Ore is contained by a silica reef on the south side of the ridge which is apparently heavily mineralized. Deposit is in the nature of a blowout with fissure veins running toward the origin and extending on the surface for approximately 700 feet. We believe there is a large ore deposit underground and that contacts with it should be made lower down the mountain in a bench-type operation permitting exposure of all existing deposits and making for economical open mining operations.
(d) 1. Access Roads, good. 2. Distance to shipping, 90 miles to railhead at Battle Mountain, Nevada. 3. Supply and residence points, approximately 30 miles to Austing,Nevada. However, we are applying in this application for assistance in constructing living quarters at the site.
(e) Availibilities - Manpower, materials and supplies are all available in adequate quantities at Austin, Nev. 30 miles distant. Equipment, water and power will be available under contract.
5. (a) Wish to explore for Manganese
(b) Please see sketch attached showing all details of exposed ore beds and proposed work to be done toward discovering extent of deposts.
(c) Work to start within 5 days,weather permitting,and be completed within 12 months.
(d) Operating experience and background of applicants.
William L. Petersen, 35 years experience as miner in all capacities - operated the Morris Copper Mine in Kimberly and other large mining operations in Austin, Nevada. Also operated the "Black Rock" Manganese Mine and wet concentrating mill at Austing during World Ware 2. Mr. Petersen will superintend the operation of the Last Chance Mine.
William H. Campbell, former owner and operator of the Leap Year Mine at Jamestown, Calif. has had considerable experience in mine development and production work
William V. Bush is currently operating a successful manganese mine near Blythe, Calif. shipping to stock pile at Wnden, Ariz. Mr. Bush was formerly in charge of the Metallurgy Laborator for Douglas Aircraft Co. and had charge and control of materials during the period 1941 - 1945.
R. Allen Lowe has had twenty years experience as a licensed General Contractor and Builder in Southern California.

(continued)

6. Estimate of Costs.

(a) Independent Contracts:

Churn Drilling @ $10. max. cost, 3 holes total 450 ft.		$ 4,500.00

(b) Labor, supervision and consultants:

3 miners	per day	$ 15.00	$ 45.00	
1 Cat. operator		20.00	20.00	
1 Superintendent		25.00	25.00	
1 Engineer/Consultant		100.00	100.00	
1 Carpenter/Mechanic		15.00	15.00	
1 Truck Driver		18.00	18.00	
			$223.00	
Estimated time to complete exploration, 180 days @			223.00	40,140.00

(c) Operating Material & Supplies.

Powder	4000# @ est.	$23.50 cwt	1,040.00	
Fuse	4000 ft @	2.00 100'	80.00	
Caps	1000		25.00	
Drill Steel 3 sets		31.50 each	104.50	
Drill Bits 9	@	16.50 " carbide	145.35	
Shovels 10	@	3.00	30.00	
Picks 6	@	2.50	15.00	
Miscellaneous Small Tools			100.00	
Acetylene & Oxygen Tanks, 3 sets @ $13.00			39.00	
Torches & Guauges			115.00	
Wheelbarrows 2	@	31.00	62.00	
Gasoline, Diesel Fuel, Oil & Grease			750.00	
			2,505.85	2,505.85

(d) Operating Equipment. Rental Schedule.

Compressor	per month		200.00	
Jackhammer	"		45.00	
Air Hose, 150'	"		25.20	
D-4 Cat. tractor w/dozer blade	"		650.00	
Cat. skip loader	"		300.00	
Electric Welder	"		93.50	
5-KW Gasoline Electric Plant	"		125.00	
2 Service Trucks	"	185.00 ea.	250.00	
1 Dump Truck	"		200.00	
Total 6 months rental @			1,888.70	11,332.20

(e) None

(f) New Building, etc.

Cook shack and equipment		1,500.00	
2 bunk houses	total	1,000.00	
Powder Magazine		50.00	
Tool Shed		400.00	
		2,950.00	2,950.00

(g) Miscellaneous - Cost of Repairs & Maintenance Etc.

Repairs & Maintenance of Equip. 10% of operating cost				1,132.20
Analytical Work, Assays	150 Mn.	@ $6.00	900.00	
"	150 Si	@ $ 3.00	450.00	1,350.00
(Churn holes to be assayed at each 5 Ft. plus other ore)				
Accounting	6 months A		200.00	1,200.00

(h) Workmen's Compensation Ins. etc.

Estimated at 10% of Total Labor in amount $40,140.00		4,014.00
(h) Contengencies(Total Operating Cost -		69,124.25
(Estimated at5%of Operating Cost		3,456.21
Total Estimate of Expenditures		$72,580.46

STATE OF NEVADA)
:SS
COUNTY OF LANDER)

AFFIDAVIT

JACK STONER of the Town of Battle Mountain, County of Lander, State of Nevada, being first duly sworn, deposes and says:

That I am the owner of an undivided one-half interest in and to the two following unpatented lode mining claims, situated about three-fourths of a mile from Indian Springs in an easterly direction near New Pass, Reese River Mining District, Lander County, Nevada, to-wit:

LAST CHANCE NO. 1, the certificate of location of which is recorded at page 279, of Book J, and

LAST CHANCE NO. 2, the certificate of location of which is recorded at page 280 of Book J, of Duplicate Mining Notices, Lander County, Nevada;

That I hereby consent to the owners of the other undivided one-half interest, namely:

WILLIAM V. BUSH,
R. ALLEN LOWE, and
WILLIAM H. CAMPBELL,

making application for aid under the Defense Minerals Exploration Program for the exploration of said claims for manganese.

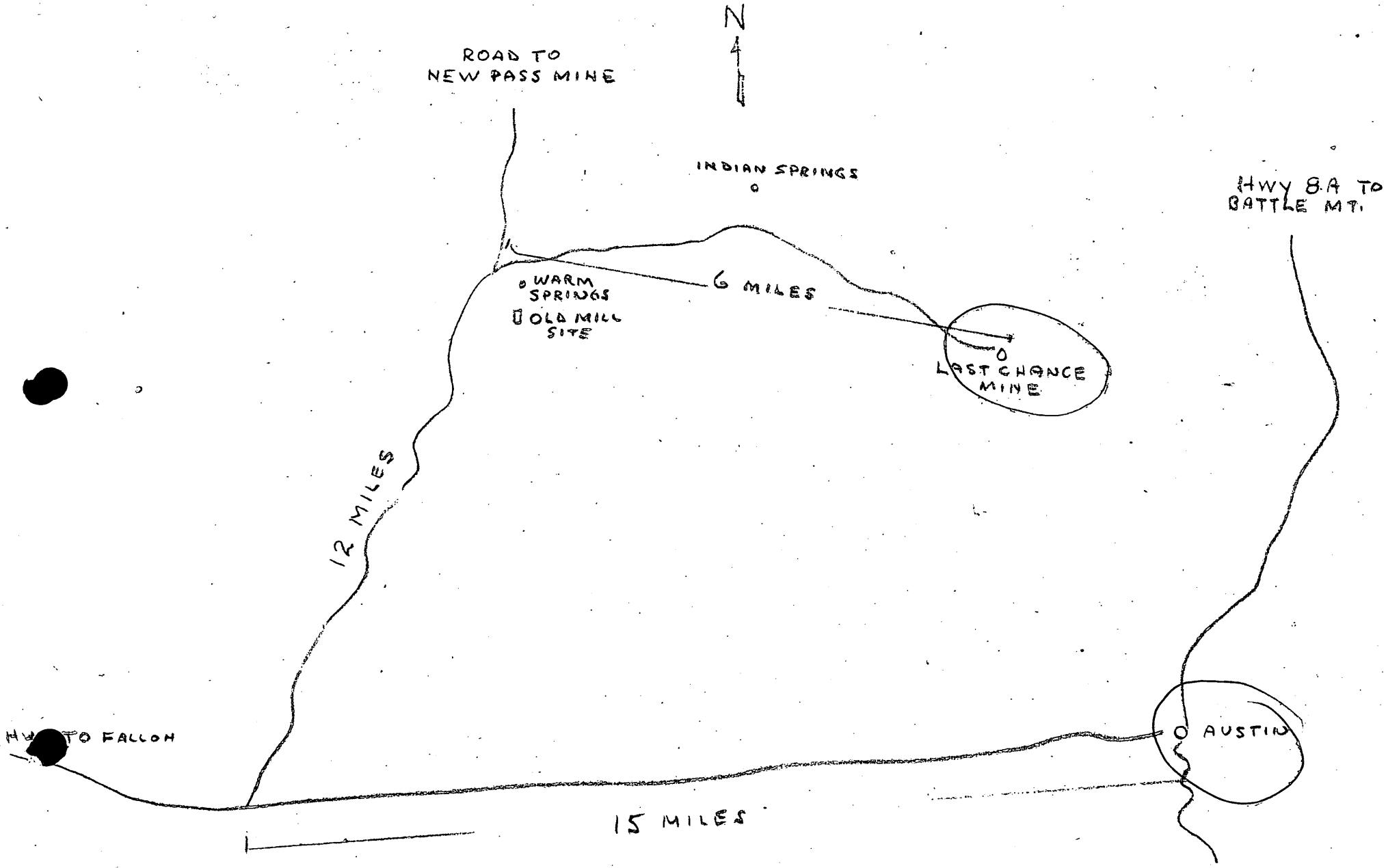
Jack Stoner
Jack Stoner

Subscribed and sworn to before me
this 19th day of August, 1954.

Irma E. Shuel
Notary Public in and for the
County of Lander, State of Nevada

My Commission Expires: Oct 20 1954.

HOWARD E. BROWNE
ATTORNEY AT LAW
RENO, NEVADA



LAST CHANCE MINE
WILLIAM G PETERSON ET AL.
AUSTIN, NEVADA

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.
November 15, 1956

MEMORANDUM

To: Administrator, DMEA

From: Iron and Ferro-Alloys Division, DMEA

Subject: General Summary of Contracts and Results Obtained
Docket No. DMEA-3478 - Manganese
Petersen, Lowe, Bush and Campbell
Last Chance Mine
Lander County, Nevada
Contract No. Idm-E793

Operator: Petersen, Lowe, Bush and Campbell, a partnership consisting of William L. Petersen, R. A. Lowe, William V. Bush and William H. Campbell, Austin, Nevada.

Operator's Property Rights:
The Operator controls, by ownership of an individed 1/2 interest, and lease from the owner of the remaining 1/2 interest, Mr. Jack Stoner, Battle Mountain, Nevada, two unpatented lode mining claims, situated in the Reese River Mining District, on the east flank of the Desatoya Mountains in Lander County, Nevada, and recorded in the Records of Lander County at the Courthouse in Austin, Nevada, as follows:

Claim Name	Book No.	Page No.
Last Chance No. 1	J	279
Last Chance No. 2	J	280

Contract: (a) Executed April 28, 1955.

(b) Completion period: Work to be commenced on or before July 1, 1955, and to be completed on or before July 1, 1956.

(c) Work authorized:

Fixed Unit Costs

Stage I

Bulldozer trenching, 15,000 cubic feet in 7 trenches, @ $0.35/cu. ft.	$5,250.00	
Assaying 25 samples for Mn @ $4.00/spl	100.00	
Total Stage I		$5,350.00

Fixed Unit Costs (cont'd)

Stage II

Excavate 105 lineal feet of test pits @ $45.00/ft.	$4,725.00	
Assaying 20 samples for Mn @ $4.00/spl	80.00	
Total Stage II		$4,805.00
Total estimated cost of project		$10,155.00
Government participation @ 75%		$ 7,616.25

Amendment No. 1, executed January 27, 1956, authorized suspension of work beginning October 20, 1955, and ending not later than April 30, 1956.

(d) Work completed:

Bulldozer trenching, 15,000 cubic feet @ $0.35/cu. ft.	$5,250.00
Test-pitting, 30 lineal feet @ $45.00/ft.	1,350.00
Assaying, 12 samples for Mn, @ $4.00/spl	48.00
Total accepted cost of project	$6,648.00
Government participation @ 75%	$4,986.00

Audits: A review in lieu of final audit, dated June 11, 1956, was received June 15, 1956.

Reports: The Operator's Final Report, dated May 28, 1956, was received in this office June 6, 1956. The Final Report of the Field Team, dated September 4, 1956, was received September 7, 1956.

Past Production:

One lot of 55.3 long tons of ore, assaying 29.2 percent Mn, 44.6 percent insolubles and 1.2 percent Fe, was shipped to Wendon, Arizona, prior to the date of the contract. A small mill was erected by the operator to up-grade siliceous ore from the Last Chance and the nearby Black Rock mines, but marketable concentrates were not produced.

Certification:

As recommended by the Field Team, a certification of discovery or development was issued by this office on NOV 23 1956

Comments: The project consisted of work on the Last Chance group of claims, to explore for ~~tungsten~~ manganese which occurs there as manganese oxides in layers and pods which generally follow the bedding planes of shale which lies between beds of chert. Manganese ore discovered by project work was estimated by the Field Team as 20,000 tons

of inferred marginal ore. Material from a test pit in the center of the block estimated as inferred ore had a weighted average assay of 21.5 percent Mn and 48.6 percent SiO_2 over a sample width of 20 feet. A sample from a pit in trench No. 6, representing 350 tons of inferred ore, assayed 18 percent Mn and 60.46 percent SiO_2 over a width of 4 feet.

W S Martin

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

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
7/14	[illegible]	120
"	Johnson	110
		220

July 15, 1965

Memorandum

To: The File

From: Assistant Chief, Office of Minerals Exploration

Subject: DMEA-3478 (Manganese)
Peterson, Lowe, Bush, and Campbell
Last Chance Mine
Lander County, Nevada
Contract Idm-E793

The MME Form 63 sent registered mail to Mr. William E. Bush, one of the owners of the subject mine, was returned marked "Unclaimed." Mr. Bush signed the last MME Form 63 on August 8, 1964. Until that time at least there had been no production from the property under the DMEA contract. A sample of a 40-ton stockpile of manganese concentrate assayed 32.8 percent Mn and 35.04 percent SiO_2. It has no value. As the ten-year royalty period terminated April 28, 1965, the subject contract can be considered closed.

George C. Selfridge

George C. Selfridge

GCSelfridge/gla
cc to: Director's Reading File
Division File
Economic Geology File
OME File
OME Reading File
OME Region II
George C. Selfridge
CA&A Division
120M

23263

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

REGISTERED MAIL
RETURN RECEIPT REQUESTED

June 16, 1965

Re: DMEX-3478 (Manganese)
Peterson, Lowe, Bush, and Campbell
Last Chance Mine
Lander County, Nevada
Contract Idm-E793

Mr. William V. Bush
3859 Winona Road
Grants Pass, Oregon 97526

Dear Mr. Bush:

After the completion of the approved exploration work under the contract identified above, we asked to be informed about changes in the status of the property and production from it during the period of royalty obligation.

To assist you to furnish this information and to assure the accuracy of our records, please answer the questions on the back of this letter and return two copies to this office with copies of any pertinent documents.

Sincerely yours,

George C. Selfridge

George C. Selfridge, Chief
Division of Exploration Operations

MME Form 63
Revised 3-62

DMEA-3478
Idm-E793

REQUEST FOR INFORMATION ON CERTIFIED PROJECT AND PROJECT UNDER ROYALTY AGREEMENT

From August 1964 to April 28, 1965

1. ~~XXXXX~~ , has there been a change in ownership, lease, or sublease? If yes, please state details of the transaction below and provide a true or signed copy of the pertinent documents, unless they have been provided before. Yes ☐ No ☐

From August 1964 to April 28, 1965

2. ~~XXXXX~~ , has there been any production from the land subject to the contract? Yes ☐ No ☐

A. If so and it was shipped, give quantity, value, and name and address of purchaser.

	Quantity	Value

B. If stockpiled awaiting sale, state quantity, grade, and location.

Type	Quantity		Estimated Grade	Location
Ore		Tons		
Concentrates		Tons		
Other		Tons		

3. Since , has any production been transported through workings (see of contract)? Yes ☐ No ☐

A. If so, state quantity, value, and disposition of material.

Disposition of Material	Quantity	Value

Submitted by:

Name _____ Title _____

Address _____ Date _____

4511

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

REGISTERED MAIL
RETURN RECEIPT REQUESTED

June 16, 1965

Re: DMEE-3478 (Manganese)
Peterson, Lowe, Bush, and Campbell
Last Chance Mine
Lander County, Nevada
Contract Idm-E793

Mr. William V. Bush
3859 Winona Road
Grants Pass, Oregon 97526

Dear Mr. Bush:

After the completion of the approved exploration work under the contract identified above, we asked to be informed about changes in the status of the property and production from it during the period of royalty obligation.

To assist you to furnish this information and to assure the accuracy of our records, please answer the questions on the back of this letter and return two copies to this office with copies of any pertinent documents.

Sincerely yours,

George C. Selfridge

George C. Selfridge, Chief
Division of Exploration Operations

MME Form 63
Revised 3-62

DMEA-3478
Idm-E793

REQUEST FOR INFORMATION ON CERTIFIED PROJECT AND PROJECT UNDER ROYALTY AGREEMENT

1. **From August 1964 to April 28, 1965** ~~Since~~ _____, has there been a change in ownership, lease, or sublease? If yes, please state details of the transaction below and provide a true or signed copy of the pertinent documents, unless they have been provided before. Yes ☐ No ☐

2. **From August 1964 to April 28, 1965** ~~Since~~ _____, has there been any production from the land subject to the contract? Yes ☐ No ☐

   A. If so and it was shipped, give quantity, value, and name and address of purchaser.

	Quantity	Value
_____	_____	_____
_____		

   B. If stockpiled awaiting sale, state quantity, grade, and location.

Type	Quantity		Estimated Grade	Location
Ore	_____	Tons	_____	_____
Concentrates	_____	Tons	_____	_____
Other	_____	Tons	_____	_____

3. Since _____, has any production been transported through workings (see _____ of contract)? Yes ☐ No ☐

   A. If so, state quantity, value, and disposition of material.

Disposition of Material	Quantity	Value
_____	_____	_____

Submitted by:

Name _____ Title _____

Address _____ Date _____

4511

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

REGISTERED MAIL
RETURN RECEIPT REQUESTED

June 16, 1965

Re: DMEM-3478 (Manganese)
Peterson, Lowe, Bush, and Campbell
Last Chance Mine
Lander County, Nevada
Contract Idm-B793

Mr. William V. Bush
3859 Winona Road
Grants Pass, Oregon 97526

Dear Mr. Bush:

After the completion of the approved exploration work under the contract identified above, we asked to be informed about changes in the status of the property and production from it during the period of royalty obligation.

To assist you to furnish this information and to assure the accuracy of our records, please answer the questions on the back of this letter and return two copies to this office with copies of any pertinent documents.

Sincerely yours,

George C. Selfridge

George C. Selfridge, Chief
Division of Exploration Operations

MME Form 63
Revised 3-62

DMEA-3478
Idm-E793

REQUEST FOR INFORMATION ON CERTIFIED PROJECT AND PROJECT UNDER ROYALTY AGREEMENT

From August 1964 to April 28, 1965

1. [redacted] , has there been a change in ownership, lease, or sublease? If yes, please state details of the transaction below and provide a true or signed copy of the pertinent documents, unless they have been provided before. Yes ☐ No ☐

From August 1964 to April 28, 1965

2. [redacted] , has there been any production from the land subject to the contract? Yes ☐ No ☐

   A. If so and it was shipped, give quantity, value, and name and address of purchaser.

	Quantity	Value
_____		
_____	_____	_____

   B. If stockpiled awaiting sale, state quantity, grade, and location.

Type	Quantity		Estimated Grade	Location
Ore	_____	Tons	_____	_____
Concentrates	_____	Tons	_____	_____
Other	_____	Tons	_____	_____

3. Since , has any production been transported through workings (see of contract)? Yes ☐ No ☐

   A. If so, state quantity, value, and disposition of material.

Disposition of Material	Quantity	Value
_____	_____	_____

Submitted by:

Name _____ Title _____

Address _____ Date _____

4511

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
WASHINGTON, D.C. 20240

OFFICIAL BUSINESS

REGISTERED

598289

6-21-65
HK,

40

RETURNED TO WRITER

REASON CHECKED
Unclaimed
Unknown
Insufficient address
Moved, Left no address
No such post office in st
Refused
Do not remail in this envelope

POSTAGE AND FEES PAID
U. S. DEPARTMENT OF THE INTERIOR

RECEIVED
JUL 12 1965
MAIL CENTER

REGISTERED MAIL
RETURN RECEIPT REQUESTED

Mr. William V. Bush
3859 Winona Road
Grants Pass, Oregon 97526

WASHINGTON, D. C. REG. DIV.
JUN 16 1965
USPO

WASHINGTON, D. C. REG. DIV.
JUL 11 1965
USPO

WASHINGTON, D. C. REG. DIV.
JUN 16 1965
USPO

JUL 17 1965

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

August 3, 1964

Re: DMEA-3478 (Manganese)
Peterson, Lowe, Bush, and Campbell
Last Chance Mine
Lander County, Nevada
Contract Idm-E793

Mr. William V. Bush
295 E. Philadelphia
Pomona, California

new address

Dear Sir:

After the completion of the approved exploration work under the contract identified above, we asked to be informed about changes in the status of the property and production from it during the period of royalty obligation.

To assist you to furnish this information and to assure the accuracy of our records, please answer the questions on the back of this letter and return two copies to this office with copies of any pertinent documents.

Sincerely yours,

George C. Selfridge

George C. Selfridge, Chief
Division of Exploration Operations

OFFICIAL FILE COPY
O. M. E.
RECEIVED AUG 14 1964

DATE	INITIALS	CODE
8/17		800
		100
8/17		~~110~~
8/18		120
	On leave	120
		220

MME Form 63
Revised 3-62

REQUEST FOR INFORMATION ON CERTIFIED PROJECT AND PROJECT UNDER ROYALTY AGREEMENT

1. Since November 1963, has there been a change in ownership, lease, or sublease? If yes, please state details of the transaction below and provide a true or signed copy of the pertinent documents, unless they have been provided before. Yes ☐ No ☒

2. Since November 1963, has there been any production from the land subject to the contract? Yes ☐ No ☒

   A. If so and it was shipped, give quantity, value, and name and address of purchaser.

	Quantity	Value

   B. If stockpiled awaiting sale, state quantity, grade, and location.

Type	Quantity	Estimated Grade	Location
Ore	Tons		
Concentrates	Tons		
Other	Tons		

3. Since [illegible], has any production been transported through [illegible] workings (see [illegible] of contract)? Yes ☐ No ☒

   A. If so, state quantity, value, and disposition of material.

Disposition of Material	Quantity	Value

Submitted by:

Name William V Bush Title Co-Owner

Address 3859 Winona Rd Date Aug 8, 1964

Grants Pass, Oregon 97526

4511

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

October 23, 1963

Re: IMEA-3478 (Manganese)
Peterson, Love, Bush, and Campbell
Last Chance Mine
Lander County, Nevada
Contract Idm-E793

Mr. William V. Bush
12942 Magnolia Avenue
Garden Grove Blvd. & Magnolia
Garden Grove, California

Dear Sir:

After the completion of the approved exploration work under the contract identified above, we asked to be informed about changes in the status of the property and production from it during the period of royalty obligation.

To assist you to furnish this information and to assure the accuracy of our records, please answer the questions on the back of this letter and return two copies to this office with copies of any pertinent documents.

Sincerely yours,

s/F. M. Murphy

F. M. Murphy, Acting Chief
Division of Minerals

OFFICIAL FILE COPY
O. M. E.
RECEIVED NOV 12 1963

DATE		DONE
11/12		800
		100
11/12		~~170~~
11/13	Murphy	500
		220

MME Form 63
Revised 3-62

REQUEST FOR INFORMATION ON CERTIFIED PROJECT AND PROJECT UNDER ROYALTY AGREEMENT

1. Since May 25, 1962, has there been a change in ownership, lease, or sublease? If yes, please state details of the transaction below and provide a true or signed copy of the pertinent documents, unless they have been provided before. Yes ☐ No ☒

2. Since May 25, 1962, has there been any production from the land subject to the contract? Yes ☐ No ☒

   A. If so and it was shipped, give quantity, value, and name and address of purchaser.

	Quantity	Value

   B. If stockpiled awaiting sale, state quantity, grade, and location.

Type	Quantity	Estimated Grade	Location
Ore	Tons		
Concentrates	Tons		
Other	Tons		

3. Since , has any production been transported through workings (see of contract)? Yes ☐ No ☒

   A. If so, state quantity, value, and disposition of material.

Disposition of Material	Quantity	Value

Submitted by:

Name William K. Bush Title Co-owner

Address 295 E Philadelphia Date Nov 7, 1963

Pomona, Calif

4512

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
7/11	Holt	500
	Griswold	500
7/13	Elbert	800
7/13	Selbridge	120
7/11	Johnson	110
7/13	Fowler	100
		220

JUL 13 1962

Mr. William V. Bush
12942 Magnolia Drive
Garden Grove Boulevard and Magnolia
Garden Grove, California

Re: DMEA-3478 (Manganese)
Peterson, Lowe, Bush, and Campbell
Last Chance Mine
Lander County, Nevada
Contract Idm-E793

Dear Mr. Bush:

The MME Form 63, "Request For Information on Certified Project and Project Under Royalty Agreement," which you so kindly completed and returned May 25, 1962, is marked to indicate that there has not been a change in ownership, lease, or sublease since January 1, 1958, and also shows no record of any ore or concentrate stockpiled or awaiting sale.

We will appreciate any information you can give us concerning the report, in your letter of May 20, 1960, that the claims might be leased to the Nevada Ore Refining Company during 1960. If that lease went into effect, did it result in any production of manganese ore?

Also, it was reported in 1955 that about 40 tons of concentrates were stockpiled at your mill for shipment and that ore was being stockpiled at the mill for treatment. Please inform us what disposition, if any, has been made of that stockpiled concentrate and ore.

Sincerely yours,

W. R. Griswold (gla)

W. R. Griswold
Chief, Division of Minerals

SPHolt/gla
7-11-62
cc to: Director's Reading File
CA&A Division
Region II (2)
Docket
Code 500

43683

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
555 Battery Street
San Francisco 11, California

OFFICIAL FILE COPY
O. M. E
RECEIVED JUN 19 1962

DATE	INITIALS	CODE
6/19	gla	500
		220

June 15, 1962

Memorandum

To: Fiscal Section, Division of Administrative Services, Office of the Secretary, Department of the Interior, Washington, D. C.

From: Acting Field Officer, OME, Region II

Subject: DMEA-3478 (Manganese)
Petersen, Lowe, Buch, and Campbell
Last Chance Mine
Lander County, Nevada
Contract Idm-B 793

Enclosed is the original of a Report of Royalty Review covering the subject contract. This office concurs in the facts as stated in the Report of Royalty Review.

PAUL V. FILLO

Paul V. Fillo

Enclosure

Copy to: Contract Administration & Audit Division, OME, Washington, D. C.
Chief, Division of Field Operations, OME, Washington, D. C.

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
		220

JUN 11 1962

Memorandum

To: Acting Field Officer, Region II

From: E. D. Talbert, Acting Chief (Signed) E. D. Talbert
Contract Administration and Audit Division

Subject: [illegible]A-3478 (Manganese)
Peterson, Lowe, Bush, and Campbell
Lost Chance Mine
Lander County, Nevada
Contract [illegible]-793

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

(a) Original to the Fiscal Section, Division of Administrative Services, Office of the Secretary, Department of the Interior, Washington 25, D. C.; and

(b) One copy for your files.

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

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

Enclosures

EDTalbert/ama 6-11-62

cc:
Docket
Director's Reading File
CA & A Division
Mr. Rothrock

43683

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

OFFICIAL FILE COPY
O. M. E.
RECEIVED MAY 28 1962

DATE	INITIALS	CODE
		800
		100
		110
5/31	Griswold	500
"	Hatt	300
		220

MAY 21 1962

Re: DMEA-3478 (Manganese)
Peterson, Lowe, Bush, and Campbell
Last Chance Mine
Lander County, Nevada
Contract Idm-E793

Mr. William V. Bush
12942 Magnolia Avenue
Garden Grove Blvd. & Magnolia
Garden Grove, California

After the completion of the approved exploration work under the contract identified above, we asked to be informed about changes in the status of the property and production from it during the period of royalty obligation.

To assist you to furnish this information and to assure the accuracy of our records, please answer the questions on the back of this letter and return two copies to this office with copies of any pertinent documents.

Sincerely yours,

W R Griswold

W. R. Griswold, Chief
Division of Minerals

MME Form 63
Revised 3-62

REQUEST FOR INFORMATION ON CERTIFIED PROJECT AND PROJECT UNDER ROYALTY AGREEMENT

1. Since January 1, 1958 , has there been a change in ownership, lease, or sublease? If yes, please state details of the transaction below and provide a true or signed copy of the pertinent documents, unless they have been provided before. Yes ☐ No ☒

2. Since January 1, 1958 , has there been any production from the land subject to the contract? Yes ☐ No ☒

   A. If so and it was shipped, give quantity, value, and name and address of purchaser.

	Quantity	Value

   B. If stockpiled awaiting sale, state quantity, grade, and location.

Type	Quantity	Estimated Grade	Location
Ore	Tons		
Concentrates	Tons		
Other	Tons		

3. Since , has any production been transported through workings (see of contract)? Yes ☐ No ☒

   A. If so, state quantity, value, and disposition of material.

Disposition of Material	Quantity	Value

Submitted by:

Name Wm V Bush Title

Address 12944 Magnolia Date May 25 1962

Garden Grove, Calif

4511

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

555 Battery Street
San Francisco 11, California

OFFICIAL FILE COPY

4/2 Hew 800
~~4/5~~ 4/9 ~~Hoff~~ S.P.H 500 ✓

March 27, 1962

220

Memorandum

To: E. D. Talbert, Acting Chief, Contract Administration and Audit Division, OME, Washington, D. C.

From: Acting Field Officer, OME, Region II

Subject: DMEA-3478 (Manganese)
Petersen, Lowe, Bush, and Campbell
Last Chance Mine
Contract Idm-E793

In reference to your memorandum of March 16, 1962, our files show no further information or replies pertaining to the subject contract.

Paul V. Fillo

Paul V. Fillo

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code

MAR 16 1962

Memorandum

To: Acting Field Officer, Region II

From: Acting Chief, Contract Administration & Audit Division (Sgd.) E. D. Talbert

Subject: DMEA-3478 (Manganese)
Petersen, Lowe, Bush, and Campbell
Last Chance Mine
Contract Idm-E793

The last examination of the property under the subject contract is indicated by the Washington office files as having been made on December 31, 1957, when it was found that no work had been performed since completion of the contract work in May 1956 and that the Operator's Warm Springs mill had been removed. Do the regional files disclose later examinations or inquiries?

An interim report by Henry W. Jones on October 27, 1955, states that 40 tons of consentrates were stockpiled at the mill for shipment and ore was being stockpiled at the mill to ensure operations. This and subsequent reports indicate that ores were produced from trench no. 4 and possibly trenches nos. 3 and 6. Do your records indicate the ultimate quantities with grades of the ores and concentrates stockpiled, or their disposition.

In a May 25, 1960, letter to William V. Bush, Mr. Gentry requested information relative to a lease of the property to the Nevada Ore Refining Company. The Washington files contain no copy of either a reply or a follow-up. If your files show further correspondence, please furnish copies.

Your cooperation in the above matters will be sincerely appreciated.

EDTalbert/cac
March 16, 1962

cc: Director's reading file
CA& Audit Division

43683

Chief, Div. of ~~Field Operations~~, OME ✓

OFFICIAL FILE COPY
O. M. E.
RECEIVED MAY 27 1960

DATE	INITIALS	CODE
5-27	gad	220
5/27	GW	800
5/31	Hart	500
		225

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
555 Battery Street
San Francisco 11, California

May 25, 1960

Mr. William V. Bush
12942 Magnolia Avenue
Garden Grove Blvd. & Magnolia
Garden Grove, California

Re: Docket No. DMEA-3478 (Manganese)
Last Chance mine
Wm. Peterson-Wm. Bush-Wm. Campbell-
Allen Lowe
Lander County, Nevada
Contract No. Idm-E 793

Dear Mr. Bush:

Reference is made to your letter of May 20, 1960 requesting a copy of the Government report and/or the grade of ore and ore reserves of the cited contract.

From the fourth paragraph of your letter I believe you understand that Government reports on such DMEA projects are for the official use of the Government only and are never made public. Therefore, this office is unable to comply with your request.

This office will appreciate receipt of any available official information relative to your lease with the Nevada Ore Refining Company in Reno, Nevada. Regarding the repayment of the Government's interest; your attention is directed to Articles 2 (d) and 7 (b) of the contract, which provides for maintenance of title and Government's right to a percentage royalty on production, respectively.

For your information, the D.M.E.A. (Defense Minerals Exploration Administration) has been succeeded by the O.M.E. (Office of Minerals Exploration) with Regional offices at 555 Battery Street, Customhouse, San Francisco, California.

We hope that your efforts to reactivate the Last Chance manganese mine will be successful and profitable.

Very truly yours,

Glenn G. Gentry
Acting OME Field Officer
Region II

Enclosures:

Bill Bush Realtor . . REAL ESTATE

HOMES • LOTS • INCOME PROPERTY • RESORTS

Office JEfferson 7-3488
Home LEhigh 9-9847

12942 Magnolia Avenue
GARDEN GROVE BLVD. & MAGNOLIA
Garden Grove, California

May 20,1960

Bureau of Mines
San Fransisco, Calif.

Gentlemen;

In 1956 the Bureau of Mines put a D. M. E. A. loan on a Manganese property known as the Last Chance Mine(or possibly Indian Springs) located approx. 35 miles North West of Austin, Nevada.

The owners involved were Bill Peterson, William Bush, Bill Campbell, and Allen Lowe. The latter three are still the owners.

I, being one of the owners, would like a copy of the report as it may be possible for a Government to recover some of the money spent if we can make a lease with the Nevada Ore Refining Co. in Reno, who have recently leased their property.

I realise that the report cannot be given out to anyone, however it seems reasonable that if it helps the Government recover the investment in the property that it should be available to me as owner of the property, at least as to % of enrichment of the deposit and extent of the reserve. I am completely familiar with the location of the sample areas as I apent 2 years on the property. The exploration was done in two stages over a period of two years.

Any assistance you can give me will be of benefit to both of us.

yours very truly

William V. Bush

OFFICIAL FILE COPY
O. M. E.
RECEIVED MAY 27 1960

DATE	INITIALS	CODE
5-27	gad	220
		800
		500

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
5/26	Alley	800
5/26	a	220
5/27	WSM	400

MAY 26 1959

Memorandum

To: Mr. George Mavor, OME Auditor

From: E. D. Talbert, Acting Chief (Signed) E. D. Talbert
Contract Administration and Audit Division

Subject: Docket No. DMEA-3478 (Manganese)
Peterson, Lowe, Bush and Campbell
Contract No. Idm-E793

Your Report of Royalty Review on the above-cited contract is acceptable and normal distribution is authorized.

AMAlley/ama
May 26, 1959

Copy to: Docket
Director's Reading File
CA & A Division

43683

SEMI-ANNUAL REPORTS OF CERTIFIED PROJECTS

Reporting Period 7/1/57-12/31/57 Date of Examination 12/31/57

Operator Peterson, Lowe, Bush, and Campbell

Mine Name Last Chance Mine

County and State Lander County, Nevada

Docket Number and Commodity DMEA-3478 (Manganese)

Contract Number Idm-E 793

ORIGINAL COPY
DMEA
RECEIVED FEB 3 1958

DATE	MTH.	CODE
2/4	C	220
	WSM	400

Date of Contract

Date of Certification

Expiration Date of Royalty Payments

NO CHANGE

Total Amount of Contract

Total Expenditures under Contract

Amount of Government Participation at %

Royalty Payments this Period

Previous Royalty Payments

Total Royalty Payments to Date

Percent Government Participation Repaid

NO CHANGE

Royalty Due on Production to Date

Royalty Remarks:

DMEA-3478 Idm-E 793

	Tons	Analysis
Original Estimate of DMEA Reserves (Field Team Final Report) Mines [ ] Survey [ ] Joint [ ]		
Revised Estimate of DMEA Reserves (Field Team) Mines [ ] Survey [ ] Joint [ ]		
Increase of Reserves by work performed subsequent to DMEA project work		
Production DMEA ore (This Period)		
(Previous)		
(To date)		
Operator's ore found subsequent to DMEA work (This period)		
(Previous)		
(To date)		

NO CHANGE

NO CHANGE

Percent Revised Reserves mined _____

Investment Data

Shafts			Winzes			Drifts & Crosscuts		
Size	Feet	Cost	Size	Feet	Cost	Size	Feet	Cost

Raises			Drilling			Rehabilitation	
Size	Feet	Cost	Type & Size	Feet	Cost	Description	Cost

NO CHANGE

Facilities

Mine Plant		Mill		Roads	
Description	Cost	Description	Cost	Description	Cost

Remarks

No additional work done on the property since completion of DMEA contract. Mill at nearby spring dismantled and moved.

Signed [illegible] (Engineer)
FOR: Henry W. Jones

DMEA Form 18
Feb. 58

DEFENSE MINERALS EXPLORATION ADMINISTRATION

ANALYSIS OF SEMIANNUAL REPORT OF CERTIFIED PROJECT

Prepare in duplicate. File original in Official Docket. Send copy

To: Statistics Branch (Code 210)

From: Division of Iron and Ferro-Alloy

Report Period: 1/1/58 thru 6/30/58

DMEA No.	Operator	Contract No.
3478	Peterson, Lowe, Bush and Campbell	Idm-E793

ORE ESTIMATES

	Tons	Analysis
DMEA LDT Mn.	20,000	21.5% Mn. 48.6% SiO_2
Operator to date	None	
Total LDT. Mn.	20,000	21.5% Mn 48.5% SiO_2
Production to date	None	
Ore in ground	20,000	21.5% Mn. 48.5% SiO_2

INVESTMENT No additional work since completion of contract

Type	Size		Feet	Cost
Shafts				
Winzes				
Drifts and Crosscuts				
Raises				
Drilling	Type			
Rehabilitation	Description			

FACILITIES

Mine Plant	All facilities removed from the property	
Mill		
Roads		

REMARKS

Total cost of project $6,648.00 Government participation 75%, $4,986.00
No ore shipped or treated. No royalties paid.

Prepared by Thos. L. Chapman Date

TLC

31398

SEMI-ANNUAL REPORTS OF CERTIFIED PROJECTS

Reporting Period 7/1/57-12/31/57 Date of Examination 12/31/57

Operator Peterson, Lowe, Bush, and Campbell

Mine Name Last Chance Mine

County and State Lander County, Nevada

Docket Number and Commodity DMEA-3478 (Manganese)

Contract Number Idm-E 793

Date of Contract

Date of Certification

Expiration Date of Royalty Payments

NO CHANGE

Total Amount of Contract

Total Expenditures under Contract

Amount of Government Participation at %

Royalty Payments this Period

Previous Royalty Payments

Total Royalty Payments to Date

Percent Government Participation Repaid

NO CHANGE

Royalty Due on Production to Date

Royalty Remarks:

DMEA-3478 Idm-E 793

	Tons	Analysis
Original Estimate of DMEA Reserves (Field Team Final Report) Mines [ ] Survey [ ] Joint [ ]		
Revised Estimate of DMEA Reserves (Field Team) Mines [ ] Survey [ ] Joint [ ]	NO CHANGE	
Increase of Reserves by work performed subsequent to DMEA project work		
Production DMEA ore (This Period)		
(Previous)		
(To date)		
Operator's ore found subsequent to DMEA work (This period)		
(Previous)	NO CHANGE	
(To date)		

Percent Revised Reserves mined _____

Investment Data

Shafts			Winzes			Drifts & Crosscuts		
Size	Feet	Cost	Size	Feet	Cost	Size	Feet	Cost

NO CHANGE

Raises			Drilling			Rehabilitation	
Size	Feet	Cost	Type & Size	Feet	Cost	Description	Cost

Facilities

Mine Plant		Mill		Roads	
Description	Cost	Description	Cost	Description	Cost

Remarks

No additional work done on the property since completion of DMEA contract. Mill at nearby spring dismantled and moved.

Signed _____ (Engineer)

Henry W. Jones

SEMI-ANNUAL REPORTS OF CERTIFIED PROJECTS

Reporting Period 1/1/57 - 6/30/57 Date of Examination 6/30/57

Operator Peterson, Lowe, Bush, and Campbell

Mine Name Last Chance Mine

County and State Lander County, Nevada

Docket Number and Commodity DMEA-3478 (Manganese)

Contract Number Idm-E 793

OFFICIAL FILE COPY
DMEA
RECEIVED AUG 5 1957

DATE	INITIALS	CODE
8/8	Conu	100

Date of Contract 4/28/55

Date of Certification 11/23/56

Expiration Date of Royalty Payments 4/28/65

Total Amount of Contract $10,155.00

Total Expenditures under Contract $6,648.00

Amount of Government Participation at 75% $4,986.00

Royalty Payments this Period None

Previous Royalty Payments None

Total Royalty Payments to Date None

Percent Government Participation Repaid None

Royalty Due on Production to Date None

Royalty Remarks: No production from the mine.

Last Chance Mine DMEA-3478 Idm-E 793

				Tons	Analysis
Original Estimate of DMEA Reserves (Field Team Final Report)					48.6% Si O_2 ✓
Mines [ ]	Survey [ ]	Joint [X]		20,000	21.5% Mn.
Revised Estimate of DMEA Reserves (Field Team)					
Mines [ ]	Survey [ ]	Joint [ ]		No change	
Increase of Reserves by work performed subsequent to DMEA project work				None	
Production DMEA ore			(This period)	None	
			(Previous)	None	
			(To date)	None	
Operator's ore found subsequent to DMEA work			(This period)	None	
			(Previous)	None	
			(To date)	None	

Percent Revised Reserves mined None

Investment Data

Shafts			Winzes			Drifts & Crosscuts		
Size	Feet	Cost	Size	Feet	Cost	Size	Feet	Cost

Raises			Drilling			Rehabilitation	
Size	Feet	Cost	Type & Size	Feet	Cost	Description	Cost

Facilities

Mine Plant		Mill		Roads	
Description	Cost	Description	Cost	Description	Cost

Remarks

No additional work done on property after completion of DMEA contract.

Signed Henry W. Jones (Engineer)
Henry W. Jones

m 7

OFFICIAL FILE COPY

Date	Surname	Code
1/30/57	Indritz	
	Dwyer	
1/31	Martin	400
2/1	Selfridge	120
"	Johnson	110
	Stillwagon	100

140

220

225

FEB 1 1957

Mrs. Maude Stoner
Battle Mountain,
Nevada

Re: Docket No. DMEA-3478 (Manganese)
Petersen, Lowe, Bush, and Campbell
Last Chance Mine
Lander County, Nevada
Contract No. Idm-E793

Dear Mrs. Stoner:

We have been informed that on October 27, 1955, a decree was entered in the case of Maude Stoner versus Jack Stoner (No. 2854, in the Third Judicial District Court, Lander County, Nevada), transferring to you Mr. Jack Stoner's undivided one-half interest in two mining claims situated at Indian Springs in Lander County, Nevada, known as Last Chance No. 1 (book No. J, page No. 279) and Last Chance No. 2 (book No. J, page No. 280).

This property is subject to a Consent to Lien signed by Mr. Jack Stoner on October 10, 1954, in favor of the Defense Minerals Exploration Administration. Transmitted herewith for your information are the following documents which pertain to the afore-mentioned two claims: (1) a copy of a Certification of Discovery or Development issued as a result of the exploration program under Contract No. Idm-E793 (Docket No. DMEA-3478); (2) a copy of a letter to Petersen, Lowe, Bush, and Campbell of Austin, Nevada; and (3) a copy of the Consent to Lien form (MF-203, Revised July 1, 1954). Your attention is called to paragraph 3 of the Consent to Lien form which provides that the landowner ". . . shall commit no act . . . that may contravene or conflict with the lien, claim, or rights of the Government . . ." and that the Consent to Lien is binding upon the "successors and assigns . . ." of the landowner.

Sincerely yours,

(for)

Administrator

PIndritz:ar 1-30-57
Copy to: DMEA docket
Adm. R. File
Oper. Comm.
W. S. Martin
Field Team, Reg. II (2)
J. L. Chambers

Enclosures

G. DeHuff, USBM
T. H. Killsgaard, USGS
R. P. Dwyer

P. Indritz Chron Pending

R.C.G.

8623

GEORGE G. HOLDEN
DISTRICT ATTORNEY
LANDER COUNTY
AUSTIN, NEVADA

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 24 1957

DATE	INITIALS	CODE
1-24	C	220
1/24	WSM	400
		225

Box 24
Battle Mountain

January 21, 1957

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

Re: Docket No. DMEA-3478 (Manganese)
Petersen, Lowe, Bush & Campbell
Last Chance Mine
Lander County, Nevada
Contract No. Idm-E793

Dear Mr. Mittendorf:

In response to your letter of December 26, 1956, the information I attempted to convey was that in the case of Stoner vs. Stoner, a divorce action, the Court did set aside any interest which Mr. Stoner had in the property to Mrs. Stoner, who is the present owner of whatever interest Mr. Stoner once held.

Therefore, by order of Court Mr. Stoner no longer has any ownership interest of any kind or nature. May I suggest that you contact the firm of Vaughan and Hull, Attorneys at Law, Elko, Nevada, in regard to Mrs. Stoner's interest, and Mr. Howard E. Browne, Attorney at Law, Reno, Nevada in regard to Mr. Petersen's interest.

Yours very truly,

George G. Holden

George G. Holden

RECEIVED
JAN 25 1957
ASSOC. SOLICITOR
MINERAL RESOURCES

GGH:pm

SEMI-ANNUAL REPORTS OF CERTIFIED PROJECTS

Reporting Period 7/1/56 - 12/31/56 Date of Examination 12/31/56

Operator Peterson, Lowe, Bush, and Campbell

Mine Name Last Chance Mine

County and State Lander County, Nevada

Docket Number and Commodity DMEA-3478 (Manganese)

Contract Number Idm-E 793

RECEIVED JAN 28 1957 D.M.E.A.

Date of Contract 4/28/55

Date of Certification 11/23/56

Expiration Date of Royalty Payments 4/28/65

Total Amount of Contract $10,155.00

Total Expenditures under Contract $6,648.00

Amount of Government Participation at 75% $4,986.00

Royalty Payments this Period 0

Previous Royalty Payments 0

Total Royalty Payments to Date 0

Percent Government Participation Repaid 0

Royalty Due on Production to Date 0

Royalty Remarks: No production from the mine.

Last Chance Mine	Idm E 793 Tons	DMEA-3478 Analysis
Original Estimate of DMEA Reserves (Field Team Final Report) Mines /____/ Survey /____/ Joint / x /	20,000	21.5% Mn. 48.6% SiO_2
Revised Estimate of DMEA Reserves (Field Team) Mines /____/ Survey /____/ Joint /____/	20,000	21.5% Mn. 48.6% SiO_2
Increase of Reserves by work performed subsequent to DMEA project work	None	
Production DMEA ore (This period)	None	
(Previous)	None	
(To date)	None	
Operator's ore found subsequent to DMEA work (This period)		
(Previous)		
(To date)		

Percent Revised Reserves mined 0

Investment Data

Shafts Size	Shafts Feet	Shafts Cost	Winzes Size	Winzes Feet	Winzes Cost	Drifts & Crosscuts Size	Drifts & Crosscuts Feet	Drifts & Crosscuts Cost

Raises Size	Raises Feet	Raises Cost	Drilling Type & Size	Drilling Feet	Drilling Cost	Rehabilitation Description	Rehabilitation Cost

Facilities

Mine Plant Description	Mine Plant Cost	Mill Description	Mill Cost	Roads Description	Roads Cost

Remarks

Signed Henry W. Jones (Engineer)
Henry W. Jones

Rubin
Dwyer
Martin
Chambers
Selfridge

UNITED STATES
DEPARTMENT OF THE INTERIOR 140
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

DEC 26 1956

George C. Holden, Esq.
District Attorney
Lander County, Nevada
Battle Mountain, Nevada

Re: Docket No. DMEA-3478 (Manganese)
Petersen, Lowe, Bush, and Campbell
Last Chance Mine
Lander County, Nevada
Contract No. Idm-E793

Dear Mr. Holden:

Thank you for your letter of December 6, 1956, in behalf of Mr. Jack Stoner. However, we are not clear as to the meaning of it.

The Government entered into an exploration project contract April 28, 1955, based in part upon the representation of Mr. Stoner that he owned an undivided one-half interest in the land that was the subject of the project. The Government also relied upon the inducement of the Consent to Lien executed by Mr. Stoner to secure any royalty that might be due the Government.

The nature of the proceeding from which you have given us an "excerpt from the Court Minutes of October 27, 1955," is not disclosed. We do not know, therefore, whether Mr. Stoner never had any interest in the land in question, or whether he did have an interest which was in some manner transferred by court order to Maude Stoner. In the latter case we are not clear that such a transfer is free of the Government's lien for royalty. It would appear from the language of the minutes that our latter supposition is the correct one.

We should point out that paragraph 3 of the form of Consent to Lien involved provides that the landowner "... shall commit no act ... that may contravene or conflict with the lien ... of the Government ..." The lien is expressly made binding upon the "heirs, executors, administrators, successors, and assigns ..." of the landowner. A copy of the Consent-to-Lien form is enclosed.

Therefore, an elaboration of the information given in your letter of December 6, 1956, would be appreciated.

HCRubin/emd 12/19/57
Copy to: DMEA Docket
Adm. R. File
Oper. Comm.
W. S. Martin
Field Team, Reg. II (2)
Enclosure
J. L. Chambers

Sincerely yours,

C. O. Mittendorf

Administrator

R.G.H.

G. DeHuff, USBM T.H.Killsgaard, USGS H.C.Rubin
R.P.Dwyer

GEORGE G. HOLDEN
DISTRICT ATTORNEY
LANDER COUNTY
~~AUSTIN~~, NEVADA

Docket

Battle Mountain

December 6, 1956

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

Re: Docket No. DMEA 3478 -
Manganese
Petersen, Lowe, Bush and Campbell
Last Chance Mine
Lander County, Nevada
Contract No. Idm-E793

Dear Sir:

Mr. Jack Stoner has asked me to inquire into the above-captioned matter on his behalf. Therefore, pursuant to your letter of November 23, 1956, and its enclosures, all of which are returned herewith, I am forwarding a certified copy of a portion of that certain order made and entered by the Court on October 27, 1955. As you will note in paragraph (a) thereof, the Court transferred Mr. Stoner's interest in the said claims to Mrs. Maude Stoner of Battle Mountain. Therefore, as of that date Mr. Stoner has no right, title, interest or estate in said claims. Nor does it appear that any liability can be attached to Mr. Stoner in the matter of the DMEA loan.

Yours very truly,

George G. Holden

George G. Holden

Enclosures

GGH:pm

RECEIVED
DEC 10 1956
D.M.E.A.

No. 2854

Maude Stoner, :

Plaintiff, :

vs. :

Jack Stoner, :

Defendant. :

Excerpt from the Court Minutes of October 27, 1955, in the above entitled case:

"II

The following-described property be, and the same hereby is, the sole and separate property of the Plaintiff, Maude Stoner, and that the Defendant hereafter shall have no interest therein:

(a) An undivided one-half interest in and to those certain mining claims known as Last Chance One and Last Chance Two, situated at Indian Springs, near New Pass, County of Lander, State of Nevada

(b) Lots 13,14,15 and 16 in Block lettered "P" of Scott's Addition to the townsite of Battle Mountain, County of Lander, State of Nevada, and the improvements situated thereon."

I hereby certify that the above to be a true and correct copy of that portion of the Court Minutes of August 20th, 1956, with regard to the above described property.

Helene L Malloy

Clerk of Lander County and
Clerk of the Third Judicial District
Court

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

NOV 23 1956

Mr. Jack Stoner
Battle Mountain, Nevada

Re: Docket No. DMEA 3478 - Manganese
Petersen, Lowe, Bush and Campbell
Last Chance Mine
Lander County, Nevada
Contract No. Idm-E793

Dear Mr. Stoner:

Transmitted herewith for your information is a copy of the certification of discovery or development issued as a result of the exploration program under the above-referenced contract. The property as set forth in the contract was referred to in a certain Affidavit executed August 19, 1954, by Jack Stoner. The same property was also referred to in an Owner's Consent to Lien executed October 10, 1954, by Jack Stoner.

Also enclosed is copy of a letter to Petersen, Lowe, Bush and Campbell.

Sincerely yours,

O P Mitteudorf

Administrator

Enclosures

RECEIVED
DEC 10 1956
D.M.E.A.

DOCKET
SURNAME
Holt
Martin
Rutin
Iglehart
Lamb
Killgoard
Selfridge
Fellmer

400

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

NOV 23 1956

Peterson, Lowe, Bush and Campbell
Austin, Nevada

Re: Docket No. DMEA 3478 - Manganese
Last Chance Mine
Lander County, Nevada
Contract No. Idm-1793

Gentlemen:

Transmitted herewith is a certification of discovery or development issued under the subject contract, which was executed April 28, 1955.

By the terms of the Exploration Project Contract, as amended, and of the certification, all production from the lands described in the referenced contract from the date of the Exploration Project Contract is subject to the Government's percentage royalty as set forth in the contract until the sum of $4,986.00 is paid or until April 28, 1965, whichever occurs first.

Payments should be made to Mr. Spangler Kicker, Executive Officer, DMEA Field Team, Region II, 1605 Evans Avenue, Reno, Nevada. Checks should be made to the Defense Minerals Exploration Administration. The purchaser should be advised to deduct royalties from the amount due on each shipment and forward check direct to the Executive Officer. Royalty payments to the Government should be accompanied by suitable evidence, such as settlement sheets, showing quantity and grade of the products sold, the name of the purchaser, and the charge certified to be correct by the purchaser.

You are requested to notify Mr. Kicker of any changes in ownership or production rights that might have any effect on the Government's rights to its percentage royalty. Also, if production ceases at any time for any extended period, please notify Mr. Kicker at 6-month intervals that no production has been made, when that is the case.

Sincerely yours,

C. O. Mittendorf
(by proxy)
Administrator

Enclosure

cc to: Oper. Comm.
Ft. REG. II
Messrs. Gilbert DeBuff, USBM
Thor H. Kilgaard, USGS
Frank D. Lamb, Rm. 3608, BM

SPMOLF:fec 11/16/56
cc to: Docket
Code 400
Code 800
Admr. Read. File

400

DOCKET SURNAME
Holt
Martin
Talbot
Lamb
Kilsgaard
Selfridge
Johnson

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

NOV 23 1956

Mr. Clarence A. Fredell, Acting Director
Technical Services Division
Defense Materials Service
7th and D Streets, N. W.
Washington 25, D. C.

Re: Docket No. DMEA 3478 - Manganese
Peterson, Lowe, Bush and Campbell
Last Chance Mine
Lander County, Nevada
Contract No. Idm-E793

Dear Mr. Fredell:

Enclosed is a copy of a certification of discovery or development issued under the subject contract.

Contract No. Idm-E793 for the exploration of the Last Chance Mine manganese deposits was executed April 28, 1955. Expenditures up to $10,155.00 were authorized by the contract, of which the Government's share at 75 percent was $7,616.25. The cost of the work completed was $6,648.00, of which the Government's share was $4,986.00.

The object of the exploration program was to test the possible manganese occurrences along a shale bed between beds of chert. The program employed bulldozer trenching and test-pitting within the shale bed to explore the mineralized zone.

The contract allowed $10,155.00 to excavate 15,000 cubic feet in seven trenches, and to excavate 105 lineal feet of test pits.

Work completed comprised 15,000 feet of excavation in seven trenches and 30 lineal feet of test pits.

Manganese ore discovered by project work was estimated by the Field Team as approximately 20,000 tons of inferred marginal ore. The weighted average assay of material in the center of the block estimated as inferred ore was 21.5 percent Mn and 48.6 percent SiO_2 over a width of 20 feet.

Sincerely yours,

Administrator

Enclosure

cc to: Admr. R. File
Oper. Comm.
FT. REG. II
Messrs. Gilbert DeHuff, USBM
T. H. Kilsgaard, USGS
F. D. Lamb, USBM

SPHOLT:FOC 11/15/56
cc to: Docket
Code 400
Code 110
Code 800

R.S.L.

Docket
SURNAME
Holt
Newton
Talbott
Selfridge
Hefner

Mr. Spangler Hicker
Executive Officer
DMEA Field Team, Region II
1605 Evans Avenue
Reno, Nevada

Re: Docket No. DMEA 3478 - Manganese
Peterson, Lowe, Bush and Campbell
Last Chance Mine
Lander County, Nevada
Contract No. Idm-2793

Dear Mr. Hicker:

Enclosed are copies of a certification of discovery or development for the above-referenced property, and of related correspondence.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (SHB)

APPROVED:

Frank D. Lamb

Member, Bureau of Mines (SHB)

Thor H. Kiilsgaard

Member, Geological Survey (SHB)

Enclosures

SPHolt:am 11-15-56
cc to: Docket
Code 400
Code 800
Admin. Read. File
Oper. Comm.
F. D. Lamb, USBM
G. L. DeHuff, Jr. USBM
T. H. Kiilsgaard, USGS
FT. REG. II

400

Docket
SURNAME
Holt
Martin
Talbot
Lamb
Kilsgaard
Selbridge
Hedgman

NOV 23 1956

Mr. Jack Stoner
Battle Mountain, Nevada

Re: Docket No. DMEA 3478 - Manganese
Petersen, Lowe, Bush and Campbell
Last Chance Mine
Lander County, Nevada
Contract No. Idm-8793

Dear Mr. Stoner:

Transmitted herewith for your information is a copy of the certification of discovery or development issued as a result of the exploration program under the above-referenced contract. The property as set forth in the contract was referred to in a certain Affidavit executed August 19, 1954, by Jack Stoner. The same property was also referred to in an Owner's Consent to Lien executed October 10, 1954, by Jack Stoner.

Also enclosed is copy of a letter to Petersen, Lowe, Bush and Campbell.

Sincerely yours,

S. O. Williams
(Acting)
Administrator

Enclosures

SPHolt:am 11-15-56
cc to: Docket
Code 400
Code 800
Admin. Read. File
Oper. Comm.
FT. REG. II
F. D. Lamb, USBM
T. H. Kiilsgaard, USGS
G. L. DeHuff, Jr. USBM

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

RECEIVED
SEP 27 1956

Date September 27, 1956

DMEA Docket No. 3478
DMEA Contract No. Idm-E 793
Commodity Manganese
Name of applicant Petersen, Lowe, Bush & Campbell
Name of property Last Chance Mine
Location of property Lander County, Nev.
Estimated cost of project $10,155.00

Memorandum

To: W. S. Martin, DMEA

From: G. L. DeHuff, Jr., Commodity Specialist, Branch of Ferrous Metals and Ferroalloys

Subject: Review of Field Team Report
(Application, Field Team Report, etc.)

1. Date of subject document: 9/4/56. 2. Date received by reviewer: 9/24/56

3. Prior reports on this property known to reviewer: Yes [x], No [ ].

4. Prior reports on nearby properties known to reviewer: Yes [ ], No [ ].

5. Information available on past production: Yes [ ], No [ ].

6. Other pertinent factors known to reviewer: Yes [ ], No [ ].

7. Explain items marked yes above:

8. Factors needing special consideration:
   a. Location [ ]
   b. Ownership [ ]
   c. Evidence of mineralization [ ]
   d. Geology [ ]
   e. Proposed exploration method [ ]
   f. Alternate exploration method [ ]
   g. Costs [ ]
   h. _____ [ ]

9. Action advised:
   a. Obtain information from applicant [ ]
   b. Refer to Field Team [ ]
   c. Denial [ ]
   d. Agree with Field Team [x]
   e. Disagree with Field Team [ ]
   f. Suggest alternate plan [ ]
   g. Request another examination [ ]
   h. Approval [ ]
   i. Consult with Mr. _____ at _____ AEC office.

10. Remarks: (Use back of page if necessary)

G. L. DeHuff Jr.

3478

ACTION ON INTERIM
OR FINAL FIELD TEAM REP

Date 9/11

Referred to:

1. Mr. ~~Hildebrand~~
2. ~~Mr. Johnson~~
3. ~~Mr. Stephens~~
4. ~~Docket Control Mail and Files~~
5. ~~Jerry Jim Adams~~ Division
6. Docket Control Mail and Files

Note comments in report regarding:

1. Certification Recommended
2.
3.
4.

and take appropriate action.

- - - - - - - -

Action taken by Division:

Preparing certification.

Robert E. Adams

DMEA Docket

RECEIVED
SEP - 7 1956

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

1605 Evans Avenue
Reno, Nevada

September 5, 1956

Memorandum

To: Operating Committee, DMEA, Interior Building, Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region II

Subject: Docket DMEA-3478 (Manganese)
Petersen, Lowe, Bush & Campbell
Last Chance Mine
Lander County, Nevada
Contract No. Idm-E793

Enclosed are four copies of our final report on subject contract by R. G. Reeves, Geological Survey and Henry W. Jones, Bureau of Mines.

The exploration work has disclosed 20,000 tons of inferred marginal ore, and Roscoe Smith and I concur in the recommendation that a certificate of discovery be issued.

S. Ricker

Encl.

Reviewed by
DMEA OPERATING COMMITTEE
9-10-56
(date)

BUREAU OF MINES
WASHINGTON, D. C.

SEP 7 7 5 AM '56

RECEIVED
SEP - 7 1956

UNITED STATES
DEPARTMENT OF THE INTERIOR
FRED A. SEATON, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION II

Final Edit Report

FINAL REPORT

DMEA-3478, Contract Idm-E793 (Manganese)
Last Chance Mine
Lander County, Nevada

Reviewed by
DMEA OPERATING COMMITTEE
9-10-56
(date).

By

Henry W. Jones
Mining Engineer
U. S. Bureau of Mines

R. G. Reeves
Geologist
U. S. Geological Survey

September 4, 1956

CONTENTS

	Page
Introduction	1
Summary, Conclusions, and Recommendations	1
Location, Accessibility, and Local Facilities	2
Property	2
The DMEA Project	3
Geology	4
Ore Deposits	6
Sampling	7
Ore Reserves	8

ILLUSTRATIONS

Figure 1.- Location map, Last Chance Mine, Lander County, Nev.

Figure 2.- Sketch map of the Last Chance workings.

Figure 3.- Geologic map.

RECEIVED
SEP - 7 1956

INTRODUCTION

The Last Chance mine, Lander County, Nevada was explored by Wm. L. Petersen, Wm. H. Campbell, R. Allen Lowe, and Wm. V. Bush (partners) of Austin, Nevada, in cooperation with the Defense Minerals Exploration Administration, docket DMEA-3478, under contract Idm-E793, dated April 28, 1955. Work was started July 15, 1955 and was completed May 1, 1956. An examination of the property to evaluate the completed program was made June 4, 1956 by Henry W. Jones, U. S. Bureau of Mines, and R. G. Reeves, U. S. Geological Survey.

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The project was designed to explore surface exposures of manganese mineralization by means of bulldozer trenching and test pits to determine the continuity and grade of ore. Exploration results partly delineated the size of the deposit. The small size of the ore bodies and metallurgical difficulties in freeing the manganese minerals from accompanying silica precludes the possibility of the deposit becoming a large producer. However, small lenses of higher grade manganese ore might be selectively mined at a profit. The deposit is inferred to contain 20,000 tons of marginal ore that may have commercial value in the future. It is recommended that a certificate of discovery be issued but no further exploration be undertaken on the property by the Government.

LOCATION, ACCESSIBILITY, AND LOCAL FACILITIES

The Last Chance claims are in an unsurveyed section of the Reese River mining district, Lander County, Nevada. They are in the low foothills to the east of the southernmost peak of the New Pass range at an altitude estimated at 6,200 feet.

The mine is reached by traveling west from Austin along U. S. Highway 50 for 15.2 miles, then northerly along the New Pass dirt road 14.0 miles to Warm Springs. Take the right-hand road and follow for 4 miles to the Indian Springs turnoff, then the right fork for 2.4 miles to the mine.

Some equipment, supplies, and labor are available in Austin. Water is obtained from the warm artesian springs 6.4 miles from the mine. Power for mining and milling is supplied by Diesel and gasoline engines.

PROPERTY

The Last Chance No. 1 and No. 2 lode mining claims are held by location and are recorded in Book "J", pages 279 and 280, Lander County courthouse, Austin, Nevada. The operators own one-half interest in the claims and Mr. Jack Stoner, Battle Mountain, Nevada, owns the remaining half.

The property was staked in 1936 by Wm. L. Petersen and Mr. Stoner, who maintained possession until late in 1953. Petersen then sold his half interest to the DMEA applicants who retained Mr. Petersen as working partner in their share of the mine. Prior to the loan application, a small amount of bulldozing work was done and a few test pits were sunk. One 10-foot inclined

pit contained manganese ore and 55.3 long tons were shipped to Wendon, Arizona. The settlement sheet, dated October 6, 1954, showed a net value of $2,094.76. Analyses showed 29.2 percent Mn., 44.6 percent insolubles, and 1.2 percent iron content.

A small mill was erected by the applicants at Warm Springs to upgrade the siliceous ore from both the Last Chance and nearby Black Rock mines, but marketable concentrates were not produced.

THE DMEA PROJECT

Work under terms of the contract was divided into two stages. Stage I consisted of drilling, blasting, and bulldozing seven trenches for a total length of 350 feet at locations designated by the Government. Each trench was 4 feet deep and 10 feet wide. Stage II consisted of two test pits, each 3 feet by 5 feet in section, one 7 feet deep and the other 23 feet deep.

Stage I started July 15, 1955. Blast holes were spaced on a 2.5-foot grid along the trench sites and drilled to a 4.4-foot depth. The trenches were eventually bulldozed as prescribed and samples collected at the more favorable locations. Deep snow and cold weather forced operations to close late in October.

Trenches 1, 2, 5, and 7 contained little or no ore. Trench 3 contains 18 feet of manganese ore assaying 21.0 percent Mn., trench 4 contains 40 feet of manganese ore assaying 22.0 percent Mn., and trench 6 contains 12 feet of manganese ore assaying 25.5 percent Mn.

Amendment No. 1, signed January 27, 1956, permitted suspension of work from October 20, 1955 to not later than April 10, 1956.

Work on Stage II started April 23, 1956. Pits were sunk in the mineralized section of trenches Nos. 3 and 6. No. 6 pit went through 6 feet of low grade ore and was abandoned in barren rock at 7.0 feet. The unused footage was applied in sinking pit No. 3 23 feet; the bottom is in ore. Total footage used on Stage II was 30 feet. The project was completed May 1, 1956.

Expenditures

Total approved cost:		$10,155.00
Bulldozing, 15,000 cu. ft. at $0.35/cu. ft.	$5,250.00	
Test pits 30 ft. at $45.00/ft.	1,350.00	
Assaying 12 samples at $4.00/ea.	48.00	
Total expenditures:		$ 6,648.00
Government's share of cost at 75 percent		4,986.00
Government's share unexpended:		2,630.00
Value of production during operations:		None ?
Government's royalty:		None

No equipment was purchased under terms of the contract.

GEOLOGY

The Last Chance claims are underlain by interbedded chert and shale of probable upper Paleozoic age which crop out on a low knoll on the east flank of the New Pass Destoya Mountains. On the north, east, and south, the chert and shale are overlapped by volcanic rocks of Tertiary age, and on the west by gravels of Quaternary age.

The chert and shale unit is the host rock of the manganese ore bodies. The chert is thin-bedded, the beds range from 2 to 18 inches in thickness and are commonly separated by shaly partings. Medium to dark greenish-gray chert is most abundant although some black and brown chert beds were noted. On weathered surfaces, the chert is stained by manganese and iron oxide. The chert generally weathers to smooth slopes except locally where discontinuous ledges are as much as 5 feet high. The shale that is interbedded with the chert is also medium to dark gray and contains thin chert layers in places. Near the manganese ore bodies the chert and shale are argillized and leached. A chert conglomerate unit is poorly exposed on the east side of the ridge, it appears to be interbedded with the upper chert layers.

The chert and shale generally strike northward and dip 20° - 40° E.; on the south, the dip flattens to about 10° E. Locally the beds are completely folded, overturned, and greatly fractured. These rocks have been cut by two sets of faults; one set strikes northward, the other set strikes eastward. One of the north-striking faults contains manganese oxides, and was the source of part of the ore shipped.

The volcanic rocks of Tertiary age to the north, east, and south of the hill consist of a basal obsidian that grades upward into dense quartz latite. These rocks strike northward and dip 15° - 25° E. and overlap the chert and shale unit.

ORE DEPOSITS

The manganese ore at the Last Chance claims is in a shale unit about 50 feet thick overlain by thin-bedded chert and underlain by a thick-bedded chert unit. The manganiferous material is distributed throughout the shale in layers and pods that in general parallel bedding, but locally follow faults and fractures.

The ore minerals include psilomelane and pyrolusite-type oxides, and some soft, earthy wad. These minerals were probably formed from the alteration of other manganese minerals, possibly primary manganese carbonates, and represent secondary concentration by weathering processes. The secondary minerals follow bedding for the most part, and form pod-like bodies a fraction of an inch to four feet or more thick. In places, these bodies are composed mainly of manganese oxides, but generally they contain altered shale and chert layers and fragments. Three or more parallel layers of manganiferous material separated by barren shale and chert were noted in the two northern open cuts. Manganese oxides were also localized along faults and fractures. The most notable fault occurrence is in the open pit at samples 1451 - 1453 where manganese oxides form a body 3 feet wide on the hanging-wall side of the fault and veinlets extend 5 feet or more into the hanging wall. This pit is the source of most of the ore (55 tons containing 29.2 percent Mn) that was shipped to Wenden, Arizona. The displacement on the fault is uncertain, but is believed to be small.

The manganese showings are exposed at intervals in trenches for a total strike length of about 400 feet, but the principal showings are in the northern 300 feet of this distance.

SAMPLING

Samples were taken in locations and trenches described as follows:

Sample No.	Width, feet	% Mn	% SiO_2	Description
255	18	21.0	53.14	Across mineralized section, No. 3 trench.
256	25	22.0	49.40	Along length No. 4 trench.
257	12	25.5	50.72	Along length No. 6 trench, across strike.
260	grab	32.8	35.04	Concentrate pile of upgraded material at mill.

Other trenches showed insufficient manganese to warrant sampling. Two test pits completed under Stage II were sampled as follows:

325*	0-5	24.0	48.37	Pit, No. 3 trench, Mn stain in oxidized gouge, considerable chert.
326	5-10	17.4	52.48	Chert and Mn oxides, gouge area between 8-10 ft. Pit No. 3 trench.
327	10-15	17.6	59.90	Mostly chert stained Mn, Pit No. 3 trench.
328	15-20	29.1	38.56	Same as 327, more oxides noted, Pit No. 3 trench.

Upper 3.0 feet of pit in unconsolidated material, not sampled.

329	0-4	18.2	60.46	Sampling downward, Pit No. 6 trench. Mostly Mn stained chert, barren from 4-7 feet.

*Samples 325 - 328 starting point was bottom of pit.

ORE RESERVES

The property is inferred to contain 20,000 tons of marginal ore in a block extending 50 feet north and 50 feet south of trench 3 pit, 20 feet thick, and to a depth of 100 feet down dip. The weighted average of material cut in the pit is 21.5 percent Mn and 48.6 percent SiO_2, over a width of 20 feet. The area of the pit in trench 6 contains an inferred 350 tons of ore in a body 50 feet long, 25 feet down the dip, and 4 feet thick. A sample across 4 feet assayed 18 percent Mn and 60.46 percent SiO_2.

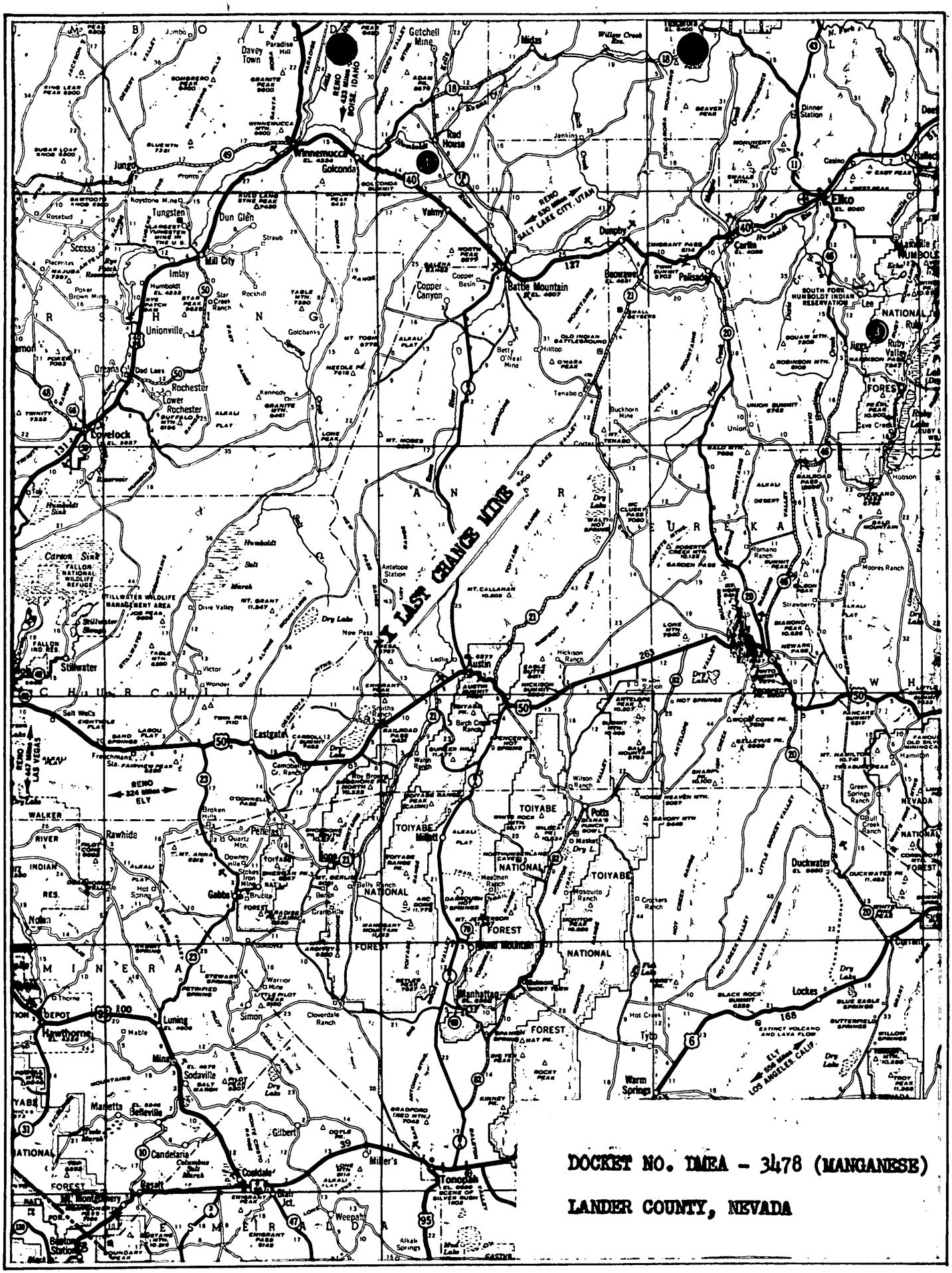


Figure I LOCATION MAP NEVADA

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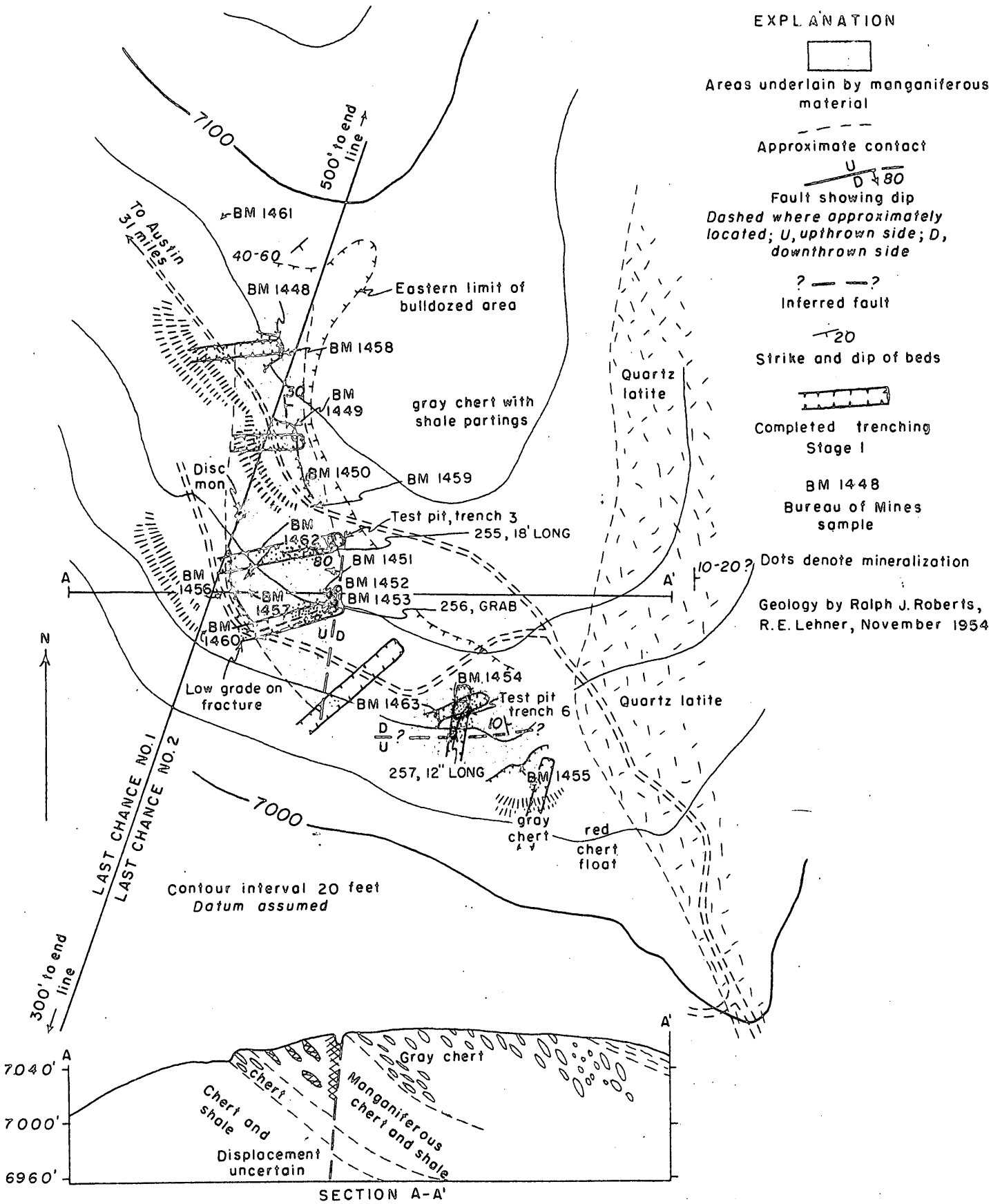
SEP - 7 1956

Idm,E-793
DMEA 3478
(MANGANESE)



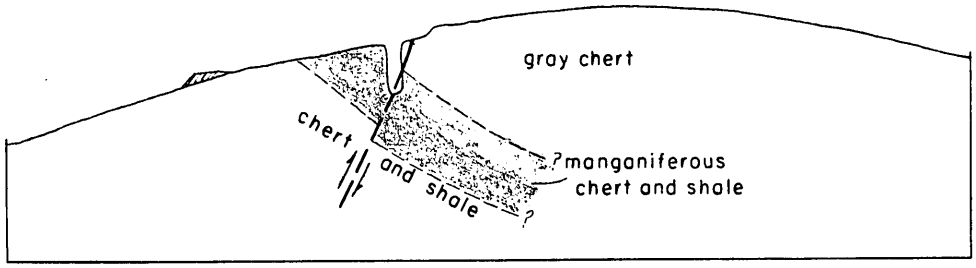
SKETCH MAP OF THE LAST CHANCE WORKINGS, NEW PASS RANGE, NEVADA

FIGURE 2

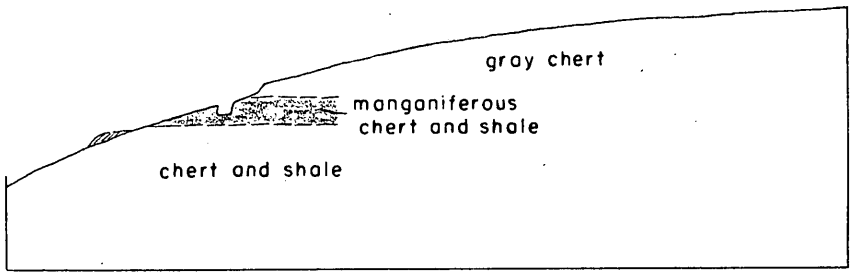
RECEIVED
SEP - 7 1956

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DMEA 3478
Idm E-793
(MANGANESE)



SECTION THROUGH TRENCH 3



SECTION THROUGH TRENCH 6

LAST CHANCE MINE, LANDER COUNTY, NEVADA

0 100 200 300 Feet

Figure 3

RECEIVED
SEP - 7 1953

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

JUN 15 1956

Mr. George Mayer
DMEA Auditor
420 Custom House
555 Battery Street
San Francisco 11, California

Re: Report of Review
Peterson, Lane, Bush,
and Campbell
Idm-E793, DMEA-3478

and

Royalty Report
L. A. Smith & B. C. Austin
Idm-E826, DMEA-3724

Dear Mr. Mayer:

Receipt is acknowledged of your Report of Review covering Contract No. Idm-E793, and your First Royalty Audit Report for Contract No. Idm-E826.

Both the Report of Review and Royalty Audit Report are acceptable and normal distribution may be effected.

Sincerely yours,

(Signed) J. L. Chambers

Jay L. Chambers, Chief
Contract Administration
and Audit Division

WBorovies/wb
June 15, 1956

Copy to: Docket (2)
Admr. Reading File
Mr. Chambers

RCS,

DMEA

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

RECEIVED
JUN - 6 1956

1605 Evans Avenue
Reno, Nevada

June 4, 1956

Memorandum

To: Operating Committee, DMEA, Interior Building, Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region II

Subject: Docket No. DMEA-3478 (Manganese)
Petersen, Lowe, Bush & Campbell
Last Chance Mine
Lander County, Nevada
Contract No. Idm-E793

Attached are four copies of the Operator's final report on subject contract. Our final examination will be made in the near future and final report will follow.

R. M. Smith
for S. Ricker

Attach.

BUREAU OF MINES
WASHINGTON, D. C.

JUN 6 8 50 AM '56

FINAL NARRATIVE REPORT

RECEIVED
JUN - 3 1956

Mr. S. Ricker
Executive Officer
DMEA Field Team
U.S. Bu. of Mines
Reno, Nevada

Re. Last Chance Manganese Mine
Lander Co., Nevada
DMEA- 3478
Contract Idm - E793

May 28, 1956

Dear Sir:

Work under terms of the DMEA contract as advised by the Bureau of Mines field team was started June 1, 1956, at which time holes were drilled at two foot intervals to a depth of four feet, along the width and bredth of the trench sites. Seven trenches were blasted and the material removed by means of a company owned T.D.9 caterpiller dozer.

Samples were taken from these trenches proving a sizable deposit of ore.

Due to weather conditions work was then abandoned until May 1, 1956 when upon the advise of the Government field crew, and as proven by the samples it was decided to sink pits on trenches No's 6 and 3. These had previously indicated good ore on a fault to about 14 feet. Trench No. 6 was abandoned when waste was encountered at 7 feet and the balance of the work was used on Trench No. 3. This pit showed good ore to adepth of 23 feet.

A small mill was constructed at Warm Springs which operated briefly prior to bad weather in the fall of 1956, and has not been reopened.

Sincerely,
W. L. Petersen
W.L. Petersen, Partner

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

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED JUL 23 1956

(FINAL)

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of May, 1956 Docket No. DMEA 370 Contract No. Idh - 1793
Operator's Name Peterson, Ivo, Bush, Campbell Minerals Manganese
Address Austin, Nevada
Contract Amount, $10,135.00 Government Participation: 75 % Amount, $ 7,616.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling						
Bulldozing Trenching		5250.00	5250.00		5250.00	5250.00
Crosscutting						
Drifting						
Excavate Pits	1350.00	0	1350.00	1350.00		1350.00
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis		100.00	100.00	48.00	-0-	48.00
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	1350.00	5350.00	6,700.00	1398.00	5250.00	6648.00

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

Date May 28, 1956 *Payee Peterson, Ivo, Bush, Campbell
Last Chance Mine
Per W. L. Peterson Title Partner

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

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

(Instructions on reverse)

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

$1048 50

Signature
(Authorized Certifying Officer)

Date Vou. No. SF-DMEA-36

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm-E793 in accordance with the terms of the contract.

Signature Henry W. Jones Title Mining Engineer Date 5/29/56

Henry W. Jones

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature S. Ricker Title Executive Officer DMEA Field Team Region II Date 5/29/56

S. Ricker

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED
JUL 23 1956

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of May 1956 Docket No. DMEA 3478 Contract No. Xdr-1793
Operator's Name Peterson, Love, Bush, Campbell Minerals Manganese
Address Austin, Nevada

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching Bulldozer	cu.ft.	0	0	5,250.00	15,000		15,000	.35¢ cu.ft.
Test Pits	ft.	1,350.00	30	1,350.00	30		105	45.00
Roads and Trails								
Sampling	Sample	~~0~~ 48.00	0 12	~~100.00~~ 48.00	~~25~~ 12		45	4.00
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		~~1,350.00~~ $1398.00		~~6,700.00~~ $6618.00				10,155.00

The undersigned company, and the [illegible] signing this cer[illegible] its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

REMARKS:

Date May 28, 1956 Operator Peterson, Love, Bush, Campbell
Last Chance Mine
Per W. L. Peterson Title Partner

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

(Instructions on reverse)

(For Government use only)

Henry W. Jones

INSTRUCTIONS

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

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

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

GPO 872894

May 28, 1956

RECEIVED
JUL 2 1 1956

Mr. S. Ricker
Executive Officer
DMEA Field Team
US Bureau of Mines
Reno, Nevada

Re. Last Chance Mine (Manganese)
Lander County, Nevada
DMEA - 3478
Contract Idn - 8793

Dear Sir:

Due to unfavorable winter conditions, the second stage of the contract on the Last Chance Mine was not started until May 1, 1956.

Locations for the test pits were selected by the Bureau of Mines Field Team. A pit was sunk on the No. 6 trench to a depth of seven feet where it appeared that the ore ended. We then moved to No. 3 trench where we sunk in ore of very good quality to a depth of 23 feet, with ore still continuing downward.

A total of 30 feet of test pit footage was used with the unused part of the No. 6 pit being applied onto sinking in the No. 3 pit.

Very Truly Yours
W. F. Petersen
Bill Peterson
Goldfield, Nevada

COPY

[illegible] MINERAL [illegible]
[illegible] P.O. BOX 937 [illegible]
RENO, NEVADA

ASSAY CERTIFICATE

Bill Peterson

11/10/55

RECEIVED JUL 2 9 1956

WE HAVE ASSAYED THE FOLLOWING SAMPLES AND FIND THE CONTENTS TO BE AS NOTED

NAME	GOLD Ozs. per Ton	VALUE GOLD	SILVER Ozs. per Ton	LEAD Per Cent Wet	COPPER Per Cent	MERCURY Lbs. Per Ton	Zn Per Cent	W Per Cent	Sn Per Cent
Heath Valley Copper	trace		none		none				

Cut	Sample	Manganese
1	3	17.81
2	2	4.67
2	3	17.52
3	2	21.31
3	3	15.77
3	3	27.15
1	1	30.95
2	1	16.35
4	1	27.74
4	2	28.61
6	1	50.81
6	2	17.52

/s/ J. Benj. Parker

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Office of
Executive Officer
DMEA Field Team
Region II

1605 Evans Avenue
Reno, Nevada

Date 4/27/56

Memorandum

To: Operating Committee, DMEA, Interior Bldg., Wash., D.C.

From: Executive Officer, DMEA Field Team, Region II

Subject: Interim Inspection Report

Attached are four copies of Interim Report on

Docket No. DMEA-3478

Contract No. Idm-E793

Commodity Manganese

RECEIVED
APR 30 1956

Operator Wm. L. Petersen, Wm. H. Campbell, R. A. Lowe, and Wm. V. Bush

Property Last Chance Mine, Lander County, Nevada

By Henry W. Jones

Dated 4/27/56

S. Ricker
Executive Officer
DMEA Field Team, Region II

Attachments

Copy to: R. M. Smith, USGS (w/copy of report)
Finance Officer, Region II (w/copy of report)
File

BUREAU OF MINES
WASHINGTON, D. C.
APR 30 9 32 AM '56

APR 27 1956

INTERIM REPORT

DMEA-3478 (Manganese)
Wm. L. Petersen, Wm. H. Campbell,
R. A. Lowe, and Wm. V. Bush
Last Chance Mine
Lander County, Nevada
Contract No.: Idm-E793

A telephone call was received April 21, 1956 from Wm. L. Petersen, operator, requesting assistance in selecting the location of test pits to be sunk on the Last Chance mine under Stage II of the contract.

The pit sites were located in accordance with interim report of October 27, 1955 in trenches No. 3 and No. 6 and work has been started. Two men are employed.

Henry W. Jones

Henry W. Jones

RECEIVED
APR 30 1956

PERSONAL

RECEIVED
APR 20 1956

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

1605 Evans Avenue
Reno, Nevada

April 18, 1956

Mr. Bill Petersen
Petersen, Lowe, Bush & Campbell
Last Chance Mine
Austin, Nevada

Re: Docket No. DMEA-3478 (Manganese)
Petersen, Lowe, Bush & Campbell
Last Chance Mine
Lander County, Nevada
Contract No. Idm-E793

Dear Mr. Petersen:

In regard to referenced contract we are hereby giving our approval to complete two pits, each 15 feet in depth, under Stage II. Pits should not be less than 3 feet by 5 feet in cross section. According to Amendment No. 1, work should be started not later than April 30, 1956.

Pits are located in trenches Nos. 3 and 6.

Please advise us a few days before you start work so that with one of our engineers' you can mutually decide on exact location of proposed pits.

Very truly yours,

S. Ricker
Executive Officer
DMEA Field Team, Region II

SRicker:gh
cc: Opr. Com., DMEA, Wash., D.C.
Finance Off., Reg. II
Geo. Mavor
R. M. Smith
File

RMEA

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

1605 Evans Avenue
Reno, Nevada

March 28, 1956

Memorandum

To: Operating Committee, DMEA, Interior Building, Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region II

Subject: Docket No. DMEA-3478 (Manganese)
Petersen, Lowe, Bush & Campbell
Last Chance Mine
Lander County, Nevada
Contract No. Idm-E793

Reference is made to your letter of January 27, 1956 in which was transmitted the original and five copies of Amendment No. 1 to subject contract.

The amendment has been executed by the Operator and the original and two copies are attached. Proper disposition has been made of the remaining copies.

S. Ricker

S. Ricker

Attach.

RECEIVED
MAR 30 1956

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

400

RECEIVED
FEB 10 1956

1605 Evans Avenue
Reno, Nevada

February 8, 1956

Mr. William V. Bush
Peterson, Lowe, Bush & Campbell
Last Chance Mine
Austin, Nevada

WSM

Re: Docket No. DMEA-3478 (Manganese)
Peterson, Lowe, Bush & Campbell
Last Chance Mine
Lander County, Nevada
Contract No. Idm-E793

Dear Mr. Bush:

Enclosed are the original and five copies of a proposed amendment No. 1 to above referenced contract, signed by the Administrator for the Government.

If the terms and conditions of this amendment are satisfactory to you as written, all six copies should be signed by you and your partners. The copy marked "Operator's Copy" should be retained by you and the original and the other four copies should be returned to this office.

If any part of this amendment does not meet with your approval, the original and all copies should be returned to this office with your suggested changes.

You will note that the amendment refers to suspension only. You should notify us at least a week before you intend to resume operations in the spring so that our engineers can consult with your representative on the ground in order to lay out the work the Government will allow under Stage II of the contract. Stage I has been completed.

Very truly yours,

S. Ricker, Executive Officer
DMEA Field Team, Region II

Encl.
SRicker:gh

cc: Opr. Com., DMEA, Wash., D. C.
Finance Off., Reg. II
Geo. Mavor
R. M. Smith
File

DOCKET
Surname:
Chapman
Martin
DeHuff
Lunkhen
Nelson
Talbert
Selfridge
Johnson

JAN 27 1956

Mr. Spangler Ricker, Executive Officer
DMEA Field Team, Region II
1605 Evans Avenue
Reno, Nevada

Re: Docket No. DMEA-3478, Manganese
Peterson, Lowe, Bush & Campbell
Last Chance Mine
Lander County, Nevada
Contract No. Idm-E793

Dear Mr. Ricker:

Enclosed are the original and five copies of a proposed Amendment No. 1 to the above-referenced contract, signed by the Administrator for the Government. Two extra copies are enclosed for use of the Field Team.

If the terms and conditions of this proposed amendment are satisfactory to you and the Operator, all six copies should be signed by the Operator and the usual distribution made.

If any part of the proposed amendment does not have your approval or that of the Operator and cannot be altered within your delegated authority, the original and all copies are to be returned to this office, together with the proposed changes for consideration.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee (SLB)

Enclosures

APPROVED:

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

Thor H. Kiilsgaard (SLB)
Member, Geological Survey

cc: Docket
Code 400
Oper. Committee
Adm. Reading File
Thor Kiilsgaard, USGS
Gilbert DeHuff, USBM
Field Team, Region 2

TLChapman/ls 12/28/55

R.C.H.

Docket copy

AMENDMENT NO. 1
to
EXPLORATION PROJECT CONTRACT Idm-E793
Dated April 28, 1955
DOCKET NO. DMEA-3478
between
THE UNITED STATES OF AMERICA
PETERSON, LOWE, BUSH, & CAMPBELL

It is agreed this _____ day of _____, 195__, that Exploration Project Contract No. Idm-E793, Docket No. DMEA-3478, dated April 28, 1955, hereinafter called the "Contract," is amended as follows:

1. (a) Work under this contract shall be suspended during the period beginning October 20, 1955, and ending not later than April 30, 1956.

(b) The Government shall not contribute to any costs incurred by the Operator during the period of suspension or to any costs of rehabilitation or repair which, in its opinion, would not have occurred if there had been no suspension of the work.

(c) The Operator, at his own cost and expense, without contribution by the Government, during the period of suspension shall preserve and protect the project work.

2. It is of the essence of this contract that the work be resumed before the termination of the period here fixed for suspension; and if it is not so resumed in the manner required by the contract, the following provisions shall thereupon become effective:

(a) Effective October 20, 1955, the contract and all obligations of the parties thereunder, except as otherwise herein expressly provided, shall be and are hereby terminated.

(b) The Government shall contribute only to the fixed unit costs of work performed prior to said effective date.

(c) 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.

(d) 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 first above written.

THE UNITED STATES OF AMERICA

By _____
Administrator, Defense
Minerals Exploration
Administration

Butin
Dwyer
Appd. Col. Off.
Chapman
Martin
~~[illegible]~~
Talbutt

_____(Partner)

_____(Partner)

_____(Partner)

_____(Partner)

400

DOCKET
Surname:
Chapman
Martin

December 19, 1955

MEMORANDUM

To: Associate Solicitor, Division of Mineral Resources

From: Iron and Ferro-Alloys Division, DMEA

Subject: Preparation of Amendment No. 1
Docket No. DMEA 3478 - Manganese
Wm. L. Peterson, et al.
Last Chance Mine
Lander County, Nevada
Contract No. Idm-E793

Transmitted herewith is a rough draft of an Amendment No. 1 to the above-captioned contract for your use in preparing the final draft.

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

Attachment

cc: Docket
Code 400

TLChapman/ls
12.19/55

RECEIVED
DEC - 8 1955

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Office of
Executive Officer
DMEA Field Team
Region II

1605 Evans Avenue
Reno, Nevada

Date 12/6/55

Memorandum

To: Operating Committee, DMEA, Interior Bldg., Washington, 25, D.C.

From: Executive Officer, DMEA Field Team, Region II

Subject: Interim Inspection Report

Attached are four copies of Interim Report on -
Docket DMEA 3478

Contract Idm-E 793

Commodity Manganese

Operator - Wm. L. Petersen, Wm. H. Campbell, R. A. Lowe, and Wm. V. Bush

Property - Last Chance Mine, Lander County, Nevada

By Henry W. Jones

Dated 12/5/55

S. Ricker
Executive Officer
DMEA Field Team, Region II

Attachments

Copy to: R. M. Smith--USGS (w/copy of report)
Finance Officer, Region II (w/copy of report)
File

BUREAU OF MINES
WASHINGTON, D. C.

DEC 8 9 12 AM '55

INTERIM REPORT

RECEIVED
DEC - 8 1955

Docket No. : DMEA-3478 (Manganese) 12/5/55

Name and address of operator: Wm. L. Petersen, Wm. H. Campbell, R. A. Lowe, and Wm. V. Bush
Austin, Nevada

Name and location of property: Last Chance Mine
Lander County, Nevada

Contract No. : Idm-E793

An attempt was made to visit the Last Chance mine Nov. 22, 1955, but heavy snowfall in the area blocked all but the main roads. The Operator, William L. Petersen, was interviewed and it was learned that no further work had been done at the mine since the last inspection. All portable machinery was removed from the mine and mill and stored near Austin for the winter.

Henry W. Jones
Henry W. Jones
Mining Engineer

XXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXX

Interior Department

Defense Minerals Exploration Adm.

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

TELEGRAM

DOCKET
SURNAME
Chapman
Martin
Selfridge
F. Johnson
Wittendorf

NOV 15 1955

MR. SPANGLER RICKER, EXECUTIVE OFFICER
DMEA FIELD TEAM, REGION II
1605 EVANS AVENUE
RENO, NEVADA

REURMEMO NOVEMBER 4, DOCKET DMEA 3478, PETERSON, LOWE, BUSH AND CAMPBELL, WITH INTERIM REPORTS OF H. W. JONES, BUREAU OF MINES AND R. G. REEVES, GEOLOGICAL SURVEY. WE CONCUR WITH YOU AND JONES THAT THE EXPLORATION PROGRAM SHOULD BE COMPLETED BY SINKING 15 FOOT PITS IN TRENCHES 3 and 6.

Ey E57

CHAIRMAN, OPERATING COMMITTEE

TLCHAPMAN:foc
11-14-55
cc to: Docket
Code 400
Adm. Read. Fild
Operating Comm.
FT. REG. II
Mr. DeHuff, USBM
Mr. Kiilsgaard, USGS

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

1605 Evans Avenue
Reno, Nevada

November 7, 1955

Memorandum

To: Operating Committee, DMEA, Interior Building, Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region II

Subject: Docket No. DMEA-3478 (Manganese)
Petersen, Lowe, Bush and Campbell
Last Chance Mine
Lander County, Nevada
Contract No. Idm-E793

Supplementary to my memorandum of November 4, 1955, I wish to call your attention to the results of assay of concentrate sample referred to in the interim report by H. W. Jones of October 27, 1955 which was attached to my memorandum.

Sample No.	%, Mn	%, SiO_2
260	32.8	35.04

These results confirm the fears as expressed in my letter of January 25, 1955 relative to beneficiation of the highly siliceous manganese ores of Nevada.

S. Ricker

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

1605 Evans Avenue
Reno, Nevada

November 4, 1955

Memorandum

To: Operating Committee, DMEA, Interior Building, Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region II

Subject: Docket No. DMEA-3478 (Manganese)
Petersen, Lowe, Bush and Campbell
Last Chance Mine
Lander County, Nevada
Contract No. Idm-E793

Attached are four copies each of interim reports by H. W. Jones, Bureau of Mines and R. G. Reeves, Geological Survey.

You will note a difference of opinion as to the next step in the program.

I would recommend that the proposal by Mr. Jones be followed. This can be done without amending the contract and the two pits will give a good idea as to the expected tenor of the ore which the Operator intends to mine and process in a mill already erected. These pits in my opinion are no more of the development type than the proposed shafts in the footwall of the ore already exposed by DMEA trenches. In addition, sinking two shafts may entail certain mechanization and additional expense and call for an extra allotment of funds not warranted, inasmuch as the Operator intends to open pit the ore body and continue to mine the ore by this method until the ore becomes rebellious and uneconomical to process in his beneficiation plant.

A certification of discovery upon completion of the two pits can be made and an indicated and inferred ore reserve of moderate size and manganese content can be estimated.

By amending the contract I fear that we will end by another amendment in an endeavor to make a large project out of what was originally intended to be and should be a small one. I am of the opinion that with the completion of the two 15-foot pits that the project will have served its purpose.

From telephone conversation with Roscoe Smith, I believe he favors the Reeves report.

Please let us have your suggestions.

S. Ricker

S. Ricker

Attach.

BUREAU OF MINES
WASHINGTON, D. C.
Nov 7 9 34 AM '55

INTERIM REPORT

Docket No.: DMEA-3478 (Manganese) October 27, 1955

Name and address of operator: Wm. L. Peterson, Wm. H. Campbell, R. A. Lowe, and Wm V. Bush
Austin, Nevada

Name and location of property: Last Chance Mine
Lander County, Nevada

Contract No.: Idm-E793

The Last Chance mine was visited on October 17, 1955 to determine if the additional work necessary to conform to terms of the contract had been completed. The loose manganese ore in Trench No. 4 had been removed and the trench deepened an additional 2 feet.

Ore was being stockpiled at the small mill at Warm Springs to ensure a continuous supply during winter months when the roads become impassable. About 40 tons of manganese concentrates, obtained from Trench No. 4 orebody, Last Chance Mine, were stockpiled at the mill for shipment. Sample No. 260 was taken of the concentrate and will be assayed for Mn and SiO_2.

Inasmuch as the operator intends to continue surface stripping of the manganese ore body, little additional work is warranted.

It is recommended that two pits be sunk to the prescribed depth on trenches No. 3 and No. 6 and wall samples taken to test tenor of manganese mineralization. A previous pit at the site of Trench No. 4 adequately tested this section and another pit in that trench is not justified.

Henry W. Jones

Henry W. Jones
Mining Engineer

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Mineral Deposits Branch
4 HOMEWOOD PLACE
MENLO PARK, CALIFORNIA

RECEIVED
NOV - 7 1955

October 25, 1955

Memorandum

To: DMEA Field Team, Region II

From: R. G. Reeves, Geologist, U. S. Geological Survey

Subject: Docket DMEA-3478 (Manganese)
Petersen, Campbell, Lowe and Bush
Last Chance Mine
Lander County, Nevada
Contract No. Idm-E793
Recommended Stage II program

The original Stage II program, to be undertaken if the results of Stage I warrant further work, provides for a 3- by 5-foot test pit 15 feet deep in each trench disclosing sufficient mineralization; the total length of all pits is not to exceed 105 feet. The cost, including assays, is $4,805.00. The pits provided for in this Stage II program are too shallow to yield sufficient additional information on the size and grade of the ore body to justify their cost. In addition, the pits would, in reality, serve to develop the ore body for mining. ?

The objective of the exploration program is to determine the ore reserves. This can only be done by following the bed down dip. It now appears, following completion of Stage I, that the most logical way to determine the grade and size, particularly the downward extent, of this deposit is by 50-foot inclined shafts down the dip of each ore body in the vicinity of trenches 3 or 4 and 6. Determination of the downward continuation of the surface showings will constitute exploration as it will yield additional information on the size and grade of the ore bodies. This information is necessary to plan for the future development, mining operation and milling facilities that are necessary if the deposit is to yield the largest possible quantity of ore.

A modified Stage II program is recommended, consisting of an inclined shaft down the dip of the ore layer in or adjacent to trench 3 and another in or adjacent to trench 6. The dip of the ore layer is variable, averaging about 30°E; in the event that the dip of the ore changes, the inclined shaft should be changed accordingly. The total length of the shafts should not exceed 105 feet, and the total cost, including assays at 5-foot intervals, should not exceed $4,805.00. This modified program was discussed with the operator and meets with his approval.

R m E a

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED
OCT 17 1955

Office of
Executive Officer
DMEA Field Team
Region II

1605 Evans Avenue
Reno, Nevada

10/13/55

Memorandum

To: Operating Committee, DMEA, Interior Building, Washington 25, D.C.

From: Executive Officer, DMEA Field Team, Region II

Subject: Interim Inspection Report

Attached are the original and three copies of an Interim Report on:

Docket No. DMEA- 3478

Contract No. Idm-E 793

Commodity Manganese

Operator Petersen, Campbell, Lowe & Bush

Property Last Chance Mine
Lander County, Nevada

By R. G. Reeves, USGS

Dated 10/7/55

S. Ricker
S. Ricker
Executive Officer
DMEA Field Team, Region II

Attachments 4

Copy to: Finance Officer, Region II(w/copy of report)
R. M. Smith-USGS(w/copy of report)

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Mineral Deposits Branch
4 Homewood Place
Menlo Park, California

RECEIVED
OCT 17 1955

October 7, 1955

Memorandum

To: DMEA Field Team, Region II

From: R. J. Roberts and R. G. Reeves, Geologists, U.S. Geological Survey

Subject: DMEA-3478, Idm-E793 (Manganese)
Peterson, Campbell, Lowe & Bush
Last Chance Mine
Lander County, Nevada
Interim Report

The Last Chance manganese mine was inspected on September 30, 1955, accompanied by Henry W. Jones, Mining Engineer, U.S. Bureau of Mines and William Peterson and Allan Lowe, two of the applicants, to evaluate the results of the completed Stage 1 trenching.

The trenches in general confirm the location and attitude of the ore zone originally indicated on the sketch map accompanying the examination report. The showings in the trenches are as follows:

Trench 1: Mainly in chert and shale with irregular narrow seams of low grade manganiferous material at 25 feet from west end of trench.

Trench 2: Mainly in chert and shale with narrow seams and small pods of manganese oxides in fractured zones 20 feet from west end of trench.

Trench 3: Mainly in chert and shale, with 18 feet of manganese oxides beginning 50 feet from the west end of the trench.

Trench 4: The west end of the trench is in fractured chert that contains low grade manganese oxides. A zone of manganese oxide, cut at 50 feet from the west end, extends 40 feet to the face.

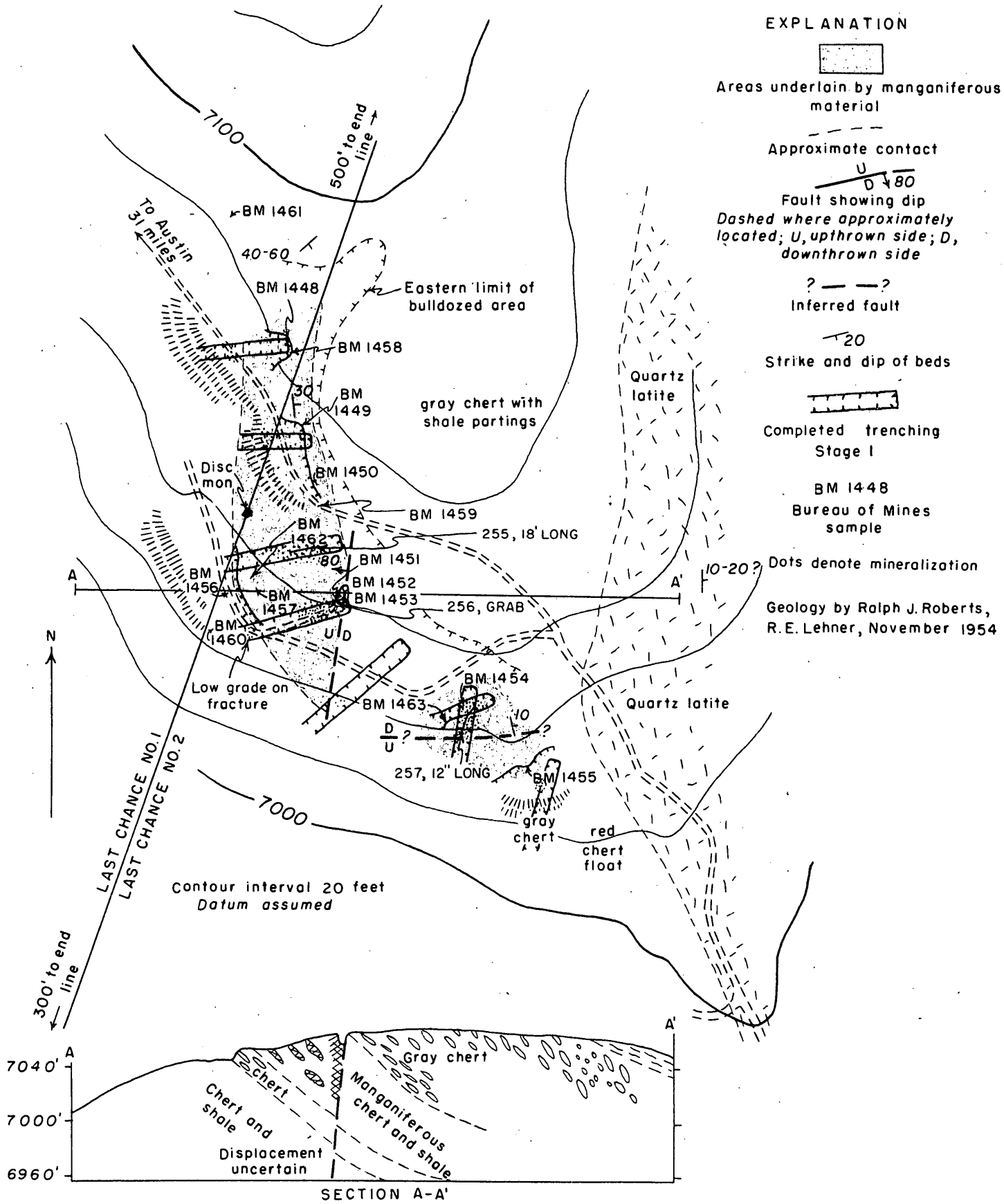
Trench 5: Mainly in shale and cherty shale that contain a few small veinlets of manganese oxides near the west end.

Trench 6: Mainly in cherty shale containing 12 feet of ore that commences 20 feet from the south end and extends toward the north face.

Trench 7: Mainly in shale and cherty shale. The center of a 10 foot wide zone of veinlets of manganese oxides in chert and cherty shale is 50 feet from the south end.

When Stage 2 is begun, it is suggested that the work be confined to the vicinity of trenches 3, 4, and 6, which have the best showings. The most informative exploration would be to sink shallow inclined shafts down the dip of the ore layers. The exact locations of the shaft collars should be chosen when the applicant has prepared the sites.

Distribution:
DMEA (4)
USBM (2)
Roberts
Reeves
File



SKETCH MAP OF THE LAST CHANCE WORKINGS, NEW PASS RANGE, NEVADA

FIGURE 2

RECEIVED
OCT 17 1955

DMEA

RECEIVED
OCT 14 1955

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Office of
Executive Officer
DMEA Field Team
Region II

1605 Evans Avenue
Reno, Nevada

10/10/55

Memorandum

To: Operating Committee, DMEA, Interior Building, Washington 25, D.C.

From: Executive Officer, DMEA Field Team, Region II

Subject: Interim Inspection Report

Attached are the original and three copies of an Interim Report on:

Docket No. DMEA- 3478

Contract No. Idm-E 793

Commodity Manganese

Operator Wm. L. Petersen, Wm. H. Campbell, R. A. Lowe, and Wm. V. Bush

Property Last Chance Mine, Lander County, Nev.

By Henry W. Jones

Dated 10/7/55

S. Ricker
S. Ricker
Executive Officer
DMEA Field Team, Region II

Attachments 4

Copy to: Finance Officer, Region II(w/copy of report)
R. M. Smith-USGS(w/copy of report)

BUREAU OF MINES
WASHINGTON, D. C.
OCT 14 8 26 AM '55

RECEIVED
OCT 14 1955

INTERIM REPORT

Docket No. : DMEA-3478 (Manganese) October 7, 1955

Name and address of operator: Wm. L. Petersen, Wm. H. Campbell, R. A. Lowe, and Wm. V. Bush

Name and location of property: Last Chance Mine
Lander County, Nevada

Contract No.: Idm-E793

The Last Chance mine was visited in company with R. G. Reeves and Ralph J. Roberts, U.S. Geological Survey on September 30, 1955 to determine if the Stage I part of the contract had been completed.

At the time of visit, all trenches had been excavated by means of a HD-9 International bulldozer along the pre-set course and to the prescribed depth. Trench No. 4, however, contained considerable loose manganese ore at a point in question along the contact. (Trench No. 1 represents the northernmost workings, fig. 2). The operator was advised to remove the material before further recommendations could be made. The manganese showings in trenches No. 3, 4, and 6, however, indicate favorable locations on which to continue the Stage II part of the program.

Three samples, taken of the exposed manganese ore in trenches No. 3, 4, and 6, are as follows:

Sample No. 255: No. 3 Trench, taken along 18 foot bottom of cut across showing, assayed 21.0% Mn and 53.14% SiO_2.

Sample No. 256: No. 4 Trench, grab sample of broken material, about 25 feet along trench, assayed 22.0% Mn and 49.40% SiO_2.

Sample No. 257: No. 6 Trench, channel sample across strike of deposit, assayed 25.5% Mn and 50.72% SiO_2.

The other trenches did not show sufficient manganese to warrant additional sampling.

Henry W. Jones

Henry W. Jones
Mining Engineer

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

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S MONTHLY REPORT AND VOUCHER

RECEIVED OCT 10 1955

Month of September 5 195 Docket No. DMEA 3478 Contract No. Idm-E793
Operator's Name Petersen, Lowe, Bush and Campbell Minerals Manganese
Address Austin, Nevada
Contract Amount, $ 10,155.00 Government Participation: 75 % Amount, $ 7,616.25

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY WJM: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	5,250.00	-	5,250.00			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	5,250.00	-	5,250.00			

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

Date 10/4/55 *Payee Petersen, Lowe, Bush & Campbell

Per W. L. Petersen Title Gen. Mgr.

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

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

(Instructions on reverse)

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

$ 3937.50

Signature
(Authorized Certifying Officer)

Date Vou. No. SF-DMEA-15

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. 1dm-E793 in accordance with the terms of the contract.

Signature Henry W. Jones Title Mining Engineer Date 10/4/55

Henry W. Jones

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Executive Officer
DMEA Field Team

Signature S. Ricker Title Region II Date 10/4/55

S. Ricker

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form [illegible]104A
(April 1952)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

ACCOUNTS OCT - 5 1955
RECEIVED
OCT 10 1955

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of September 1955 Docket No. DMEA - 3478 Contract No. Idm-E793
Operator's Name Petersen, Lowe, Bush, & Campbell Minerals Manganese
Address Austin, Nevada

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching (Bulldozer)	cu. ft.	5,250	15,000	5,250.00	15,000		15,000	0.35
Test Pits								
Roads and Trails								
Assaying							25	4.00
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								5,350.00

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

Date 10/4/55 Operator Petersen, Lowe, Bush, & Campbell

Per W. L. Petersen Title Gen. Mgr.

W. L. Petersen

REMARKS:

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

(Instructions on reverse)

(For Government use only)

Henry W. Jones

INSTRUCTIONS

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

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

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

GPO 83-38475

OPERATOR'S NARRATIVE REPORT

RECEIVED
OCT 10 1955

Work under terms of the contract was started on July 1, 1955. At this time one miner was employed drilling 4.0 foot holes on 2.5 foot intervals along trench sites as laid out by Bureau of Mines personnel. This work was done in conjunction with a preliminary project of stripping to allow solid formation on which to drill.

All trench sites were blasted and the loose material was removed by means of a T.D.-9 International caterpillar tractor to a 4.0 foot specified depth by October 1, 1955. A total, slightly in excess of 15,000 cubic feet of overburden, was removed. Excellent manganese showings were indicated in trenches 3, 4, 6 and 7 with the major showing in 3 and 4.

The deposit near the fault zone shows fair continuation with increasing grade of manganese at depth.

It is believed that the second stage of the exploration contract should consist of a vertical shaft near the fault zone of trench No. 3 and a second incline shaft on the strike of the mineral on trench No. 6.

W. L. Petersen

W. L. Petersen

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Office of
Executive Officer
DMEA Field Team
Region II

1605 Evans Avenue
Reno, Nevada

RECEIVED
SEP 16 1955

9/13/55

Memorandum

To: Operating Committee, DMEA, Interior Building, Washington 25, D.C.

From: Executive Officer, DMEA Field Team, Region II

Subject: Interim Inspection Report

Attached are the original and three copies of an Interim Report on:

Docket No. DMEA- 3478

Contract No. Idm-E 793

Commodity Manganese

Operator Wm. L. Peterson, Wm. H. Campbell, R. A. Lowe, and Wm. V. Bush

Property Last Chance Mine, Lander County, Nev.

By Henry W. Jones

Dated 9/12/55

S. Ricker
Executive Officer
DMEA Field Team, Region II

Attachments 4

Copy to: Finance Officer, Region II(w/copy of report)
R. M. Smith-USGS(w/copy of report)

BUREAU OF MINES
WASHINGTON, D. C.
SEP 16 8 29 AM '55

RECEIVED
SEP 16 1955

INTERIM REPORT

Docket No.: DMEA-3478 (Manganese) September 12, 1955

Name and address of operator: Wm. L. Peterson, Wm H. Campbell, R. A. Lowe, and Wm. V. Bush
Austin, Nevada

Name and location of property: Last Chance mine
Lander County, Nevada

Contract No.: Idm-E793

The Last Chance Mine was visited September 2 to determine the extent of work completed under terms of the DMEA exploratory loan.

All trench sites were drilled and blasted to a 4.4 foot depth. The bulldozer was not immediately available, consequently, the operators have not cleaned the trenches as prescribed in the Stage I part of the contract.

The small manganese concentrating mill, constructed by the operators at Warm Springs, was shut down after a short run. A larger jaw crusher is being installed to replace the small gyratory plant. Additional upgrading is also necessary before the present concentrate can be commercially handled.

Henry W. Jones

Henry W. Jones
Mining Engineer

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Office of
Executive Officer
DMEA Field Team
Region II

1605 Evans Avenue
Reno, Nevada

8/19/55

Memorandum

To: Operating Committee, DMEA, Interior Building, Washington 25, D.C.

From: Executive Officer, DMEA Field Team, Region II

Subject: Interim Inspection Report

Attached are the original and three copies of an Interim Report on:

Docket No. DMEA-3478

Contract No. Idm-E 793

Commodity Manganese

Operator W. L. Petersen, Wm. H. Campbell, R. A. Lowe, and Wm. V. Bush

Property Last Chance Mine, Lander County, Nevada

By Henry W. Jones

Dated 8/19/55

RECEIVED
AUG 23 1955

S. Ricker
Executive Officer
DMEA Field Team, Region II

Attachments 4

Copy to: Finance Officer, Region II(w/copy of report)
R. M. Smith-USGS(w/copy of report)

BUREAU OF MINES
WASHINGTON, D. C.

AUG 22 12 08 PM '55

INTERIM REPORT

Docket No.: DMEA-3478 - Manganese August 19, 1955

Name and address of operator: Wm. L. Petersen, Wm. H. Campbell, R. A. Lowe, and Wm. V. Bush
Austin, Nevada

Name and location of property: Last Chance Mine
Lander County, Nevada

Contract No.: Idm-E793

RECEIVED
AUG 22 1955

SUMMARY

The Last Chance mine was visited on August 5, 1955 to determine the extent of mining progress carried out under terms of the DMEA exploration contract.

Drilling and blasting the trench sites in preparation for bulldozer operations was still in progress. Trench No. 3 was drilled and shot for a 50 foot length, trench No. 4 was blasted over an overall 90 foot length, and trench No. 5 was being drilled during the visit.

Jackhammer holes spaced on a 2.5 foot grid are drilled to a 4 foot 4 inch depth on the trench sites and loaded with four to six sticks of 45 percent dynamite. The rock is broken sufficiantly so that it can be handled by bulldozer. The operator stated that the Stage I part of the program will be completed on or before September 1, 1955.

OTHER INFORMATION

The small manganese concentrating mill at Warm Springs was placed in operation on August 3, 1955. Ore was being hauled from

the loose surface material on the Last Chance mine for upgrading.

Mr. Wm. L. Petersen, one of the operators, obtained application forms for additional exploration on the nearby Black Rock manganese mine.

Henry W. Jones

Henry W. Jones
Mining Engineer

R m E a

Defense Minerals Administration
RECEIVED
MAY 25 1955

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Office of
Executive Officer
DMEA Field Team
Region II

1605 Evans Avenue
Reno, Nevada

Date: May 23, 1955

Memorandum

To: Operating Committee, DMEA, Interior Bldg., Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region II

Subject: Interim Inspection Report

Attached are four copies of Interim Report on -
Docket DMEA 3478

Contract Idm-E 793

Commodity Manganese

Operator - Wm. L. Petersen, Wm. H. Campbell, R. A. Lowe, and Wm. V. Bush
Property - Last Chance Mine, Lander County, Nevada

By Henry W. Jones

Dated May 20, 1955

S. Ricker
Executive Officer,
DMEA Field Team, Region II

Attachments

Copy to: R. M. Smith--USGS (w/copy of report)
Finance Officer, Region II (w/copy of report)
File

BUREAU OF MINES
WASHINGTON, D. C.

MAY 25 8 16 AM '55

INTERIM REPORT

Docket No.: DMEA-3478 - Manganese May 20, 1955

Name and address of Operator: Wm. L. Petersen, Wm H. Campbell, R. A. Lowe, and Wm. V. Bush
Austin, Nevada

Name and location of property: Last Chance Mine
Lander County, Nevada

Contract No.: Idm-E793

The Last Chance mine was examined in company with W. V. Bush, partner, on May 11, 1955, after the DMEA contract had been signed by the Operator and returned to the Government office.

Trench sites were laid out and staked at locations specified on the map accompanying the exploration contract.

Work under terms of the Government contract will not go into effect until July 1, 1955 at which time a two stage exploration program will start. The second stage of sinking test pits will depend on results of the Stage I, trench bulldozing.

The operators are holding in abeyance work on the property until they have completed construction of a small concentrating mill at Warm Springs, approximately five miles distant. The mill, reportedly to be completed in 30 days, will handle about 1-1/2 tons of ore per hour and upgrade it to a 35 percent manganese concentrate. The mill will consist of a primary crusher, a set of rolls, jigs and tables, and powered by a caterpillar Diesel stationary engine.

Henry W. Jones

Henry W. Jones
Mining Engineer

DMEA

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

1605 Evans Avenue
Reno, Nevada

May 16, 1955

Memorandum

To: Operating Committee, DMEA, Interior Building, Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region II

Subject: Docket No. DMEA-3478 - Manganese
Petersen, Lowe, Bush and Campbell
Last Chance Mine
Lander County, Nevada
Contract No. Idm-E793

Reference is made to your letter of April 28, 1955, transmitting to this office the original and five copies of the subject contract.

The contract has been executed on the part of the Operator and one copy retained by him for his files. Distribution has been made of Finance Office and Field Team copies, and the original and two remaining copies are being returned to you herewith.

Johnson F. Gardner
FOR: S. Ricker

Encls.

BUREAU OF MINES
WASHINGTON, D. C.
MAY 18 8 52 AM '55

DOCKET
SURNAME
Chapman
Martin
400 Newcomb
Chumbler
Selfridge
Johnson

APR 2 8 1955

Mr. Spangler Richer, Executive Officer
DMEA Field Team, Region II
1655 Evans Avenue
Reno, Nevada

Re: Docket No. DMEA 3470 - Manganese
Patterson, Lane, Bush and Campbell
Last Chance Mine
Lander County, Nevada

Dear Mr. Richer:

Enclosed are the original and five copies of a proposed contract for an exploration program by the above referenced applicant, signed by the Administrator for the Government, together with Exhibit "A" (2 pages), Annex I (1 page) and 2 maps.

If any part of the proposed contract does not have your approval or that of the Applicant and cannot be altered within your delegated authority, the original and all copies are to be returned to this office, together with the proposed changes for consideration.

Sincerely yours,

George C. Selfridge
By ESF

Chairman, Operating Committee

Enclosures

TLChapman:fcc
4-11-55
cc to: Docket
Code 400
Admr. Reading File
Operating Comm.
FT. REG. II
Messrs. DeHaff, USBM
Kiilsgaard, USGS

APPROVED:

/s/ Robert W. Geehan
By ESF
Member, Bureau of Mines

Thor H. Kiilsgaard
By ESF
Member, Geological Survey

R.C.R.

Extra copy

MF-200A
(Revised June 1954)

Docket No. DMEA [illegible]

Commodity [illegible]

Contract No. Idm-E .....

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] [illegible],

whose mailing address is [illegible],

hereinafter called the "Operator," as follows:

ARTICLE 1. *This contract* is entered into under the authority of the Defense Production Act of 1950, as amended. It consists of this form (MF-200A), the attached Exhibit "A," Annex I, and .....

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

ARTICLE 2. *Operator's property rights.*—(a) The land which is the subject of this contract (hereinafter called "the land") is in the State of [illegible], County of [illegible], and is described in Annex I.[3]

(b) The Operator represents and undertakes that:

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

(2) The Operator's right, title, or interest (whether as owner, lessee, or otherwise) is subject only to the following claims, liens, or encumbrances: [illegible]

(c) The Subordination Agreement of the holder of any claim, lien, or encumbrance listed above, and (if the Operator does not hold the legal title) the Consent to Lien of any holder of the legal title of the land (lessor, seller, optionor, etc.), are attached, as follows: [illegible]

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

(d) The Operator shall preserve and maintain his right, title, and interest in the land and his right to the possession thereof for the purposes of this contract, and shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of this contract. Until the lapse of the time within which the Government may make a certification of discovery or development without any such certification having been made, and after any such certification has been made, the Operator shall neither transfer, convey, nor surrender the land nor any right, title, or interest therein, nor permit nor suffer any claim, lien, or encumbrance thereon, without expressly referring to and providing in the instrument of conveyance, lien, or encumbrance for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof. If the Government makes no certification of discovery or development within the time limited in Article 7, it shall thereafter have no claim against the land or any production therefrom except for any production referred to in Article 7(b)(1).

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

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

(b) *Government may inspect.*—The Operator shall consult with and inform the Government on all phases of the work as it progresses. The Government may enter at all reasonable times to inspect the work under the contract, and also after a certification of discovery or development to inspect production operations and underground workings. The operator shall provide the Government with all reasonable means of access for such inspections.

ARTICLE 5. *Contribution by the Government.*—A fixed cost for each unit of work to be performed (per foot of drifting, per foot of drilling, per hour of operations, etc.) is hereby agreed upon, and is set forth in Exhibit "A" in connection with the estimated total cost of the project in the sum of $10,155.00 The Government will contribute [illegible] percent of the fixed unit costs as work is performed, in a total sum not in excess of $7,616.25: *Provided,* That until the Operator has rendered to the Government his final report, and any final auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of 10 percent of the estimated total cost of the work. The Government will make its contribution on the basis of the monthly vouchers referred to in Article 6(b), but all payments by the Government are provisional only, subject to audit, until the account between the Operator and the Government is finally audited and settled. To the extent that excesses over fixed unit costs or any excess over the estimated total cost may be necessary for the performance of the work, the Operator shall incur and pay such excesses for his own account without contribution by the Government. The Government may make payments directly to independent contractors and suppliers for the account of the Operator rather than to the Operator.

ARTICLE 6. *Reports, accounts, audits.*—(a) *Operator's records.*—The Operator shall keep suitable records and accounts of the units of work performed and of any production in which the Government may have an interest; and shall preserve those with respect to work performed for at least three years after final payment by the Government, and those with respect to production for at least three years after any obligation to pay royalties to the Government has terminated. The Government may inspect and audit said records and accounts at any time, either by itself or by a certified public accountant. The Comptroller General of the United States or his representative, until the expiration of said three-year periods, shall have access to and the right to examine any pertinent books, documents, papers, and records of the Operator. All of the Operator's vouchers and records and accounts relating thereto and the Government's payments thereof remain subject to adjustment until final audit by the Government.

(b) *Progress reports and vouchers.*—The Operator shall provide the Government with five copies of monthly progress reports in three sections as follows: (1) Operator's Monthly Report and Voucher showing a detailed statement of units of work performed during the reporting period; (2) Operator's Unit Cost and Progress Report showing the various types of work performed during the reporting period and the fixed unit costs incurred for each type of work; and (3) a Narrative Report of the work

EXPLORATION PROJECT CONTRACT
PETERSEN, LOWE, BUSH, and CAMPBELL
DOCKET NO. DMEA-3478

EXHIBIT "A"

Description of the Work

The work is divided into two successive stages, as follows:

Stage I

Drill, blast, and bulldoze four trenches, approximately in the locations and in the lengths indicated on a map, Figure 2, entitled "Sketch Map of the Last Chance Workings . . .", attached hereto and made a part hereof. The total trench length shall be approximately 290 feet. Each trench shall be approximately 10 feet wide and 4 feet deep. The total excavation shall not exceed 12,000 cubic feet, including entry in and out of trenches.

The trenches shall be sampled at approximately 10-foot intervals and the samples assayed for manganese and silica.

Stage II

If, in the opinion of the Government, the results of Stage I warrant further work, Stage II shall be performed.

Trench No. 3, shown on Figure 2, shall be deepened, by drilling, blasting, and bulldozing, from 4 feet to 20 feet, over a length of approximately 50 feet. The trench shall be approximately 10 feet wide. The total excavation shall not exceed 14,000 cubic feet, including entry in and out of trench.

The trench shall be sampled at approximately 10-foot intervals and assayed for manganese and silica.

Fixed Unit Costs

Stage I

12,000 cubic feet of excavation @ $0.35/cu. ft.	$4,200.00

Assaying, 30 samples @ $4.00/ea.	$ 120.00	
		$4,320.00

Stage II

14,000 cubic feet of excavation @ $0.50/cu. ft.	7,000.00	
Assaying, 10 samples @ $4.00/ea.	40.00	
		7,040.00
Estimated total cost of project		$11,360.00
Government participation @ 75%		$ 8,520.00

CLASS OF SERVICE

This is a fast message unless its deferred character is indicated by the proper symbol.

WESTERN UNION

TELEGRAM

W. P. MARSHALL, PRESIDENT

(43)

SYMBOLS

DL=Day Letter

NL=Night Letter

=International Letter Telegram

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

1955 APR 19 PM 3 45

WP060 PD=RENO NEV 19 1150AMP=

GEORGE C SELFRIDGE, CHAIRMAN OPERATING COMMITTEE=

DEFENSE MINERALS EXPLORATION ADM INTERIOR BLDG=

RE DOCKET #DMEA-3478 MANGANESE LAST CHANCE MINE LANDER COUNTY NEVADA YOUR LETTER APRIL 15TH WE APPROVE OF YOUR SUGGESTION AND CAN SEE NO REASON WHY SUCH A CONTRACT WOULD NOT BE ACCEPTABLE TO THE APPLICANT=

S RICKER=

DEPARTMENT OF THE INTERIOR
Bureau Mines
RECEIVED
APR 19 1955

#DMEA-3478=

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

DOCKET COPY

400

Chapman
Martin
Selfridge
K Johnson
Rutledge

APR 15 1955

Mr. Spangler Ricker, Executive Officer
DMEA Field Team, Region II
1605 Evans Avenue
Reno, Nevada

Re: Docket No. DMEA 3478 - Manganese
Petersen, Lowe, Bush & Campbell
Last Chance Mine
Lander County, Nevada

Dear Mr. Ricker:

We have written a proposed contract, following more or less the suggestions of the Field Team, for the above-referenced application. Certain objections have been raised to the longitudinal trench and the deepening of one trench to 20 feet. It was thought that the program might do no more than change "inferred" ore to "indicated." We are, therefore, considering a contract as follows:

Reference is made to the Geological Survey map, Figure 2, which accompanied the Field Team's report.

Excavate cross trenches at BM-1458, BM-1449, BM-1450, BM-1453, 50 feet southeast of BM-1453, BM-1454, and BM-1455, each trench to be approximately 50 feet long, 10 feet wide, and 4 feet deep.

In each trench that shows encouraging mineralization, sink a test pit approximately 15 feet deep, at a point to be selected by the Operator with the approval of the Field Team.

We would appreciate your comments by telegram on such a contract and also if you think it would be acceptable to the applicant.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (GCS)

Approved:

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

Thor H. Kiilsgaard (THK)
Member, Geological Survey

TLChapman/WSMartin/ls 4/15/55

cc: DOCKET
ADM. READ. FILE
OPER. COMMITTEE
CODE 400
G. DeHUFF, USBM
T. KIILSGAARD, USGS
FT, REG. 2 - Reno

R.C.h.

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

APR - 7 1955.

Memorandum

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

From: Acting Assistant Solicitor, Defense Minerals

WSM

Subject: Docket No. DMEA-3478, Petersen, Lowe, Bush, and Campbell (Manganese)

Pursuant to Mr. Martin's memorandum dated March 28, we have prepared the attached contract, in satisfactory legal form, subject to the attachment of the map referred to therein.

J. L. Hofflund
J. L. Hofflund
Acting Assistant Solicitor
Defense Minerals

Attachments

DOCKET
Surname:
Chapman
Martin

400

March 28, 1955

MEMORANDUM

To: Acting Assistant Solicitor, Defense Minerals

From: Iron and Ferro-Alloys Division, DMEA

Subject: Preparation of contract
Docket No. DMEA 3478 - Manganese
Petersen, Lowe, Bush & Campbell
Last Chance mine
Lander County, Nevada

Transmitted herewith is a rough draft of a proposed contract for your use in preparing the final form.

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

Attachment

cc: Docket ✓
Code 400

TLChapman/ls
3/28/55

MF-200A
(Revised June 1954)

Docket No. DMEA 3478

Commodity Manganese

Contract No. Idm-E

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] William M. Peterson, R. A. Lowe, William V. Bush, and William H. Campbell,

whose mailing address is Austin, Nevada,

hereinafter called the "Operator," as follows:

ARTICLE 1. *This contract* is entered into under the authority of the Defense Production Act of 1950, as amended. It consists of this form (MF-200A), the attached Exhibit "A," Annex I, and .....

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

ARTICLE 2. *Operator's property rights.*—(a) The land which is the subject of this contract (hereinafter called "the land") is in the State of Nevada, County of Lander, and is described in Annex I.[3]

(b) The Operator represents and undertakes that:

(1) The Operator is the [4] owner and other / of [5] owner's Affidavit & Consent to Lien in the land, in possession and entitled to possession for all of the purposes of this contract, under and by virtue of a [6] Affidavit, [7] recorded in Book ....., page ....., official records of said County; and

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

(c) The Subordination Agreement of the holder of any claim, lien, or encumbrance listed above, and (if the Operator does not hold the legal title) the Consent to Lien of any holder of the legal title of the land (lessor, seller, optionor, etc.), are attached, as follows: Owner's Consent to Lien

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

(d) The Operator shall preserve and maintain his right, title, and interest in the land and his right to the possession thereof for the purposes of this contract, and shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of this contract. Until the lapse of the time within which the Government may make a certification of discovery or development without any such certification having been made, and after any such certification has been made, the Operator shall neither transfer, convey, nor surrender the land nor any right, title, or interest therein, nor permit nor suffer any claim, lien, or encumbrance thereon, without expressly referring to and providing in the instrument of conveyance, lien, or encumbrance for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof. If the Government makes no certification of discovery or development within the time limited in Article 7, it shall thereafter have no claim against the land or any production therefrom except for any production referred to in Article 7(b)(1).

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

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

(b) *Government may inspect.*—The Operator shall consult with and inform the Government on all phases of the work as it progresses. The Government may enter at all reasonable times to inspect the work under the contract, and also after a certification of discovery or development to inspect production operations and underground workings. The operator shall provide the Government with all reasonable means of access for such inspections.

ARTICLE 5. *Contribution by the Government.*—A fixed cost for each unit of work to be performed (per foot of drifting, per foot of drilling, per hour of operations, etc.) is hereby agreed upon, and is set forth in Exhibit "A" in connection with the estimated total cost of the project in the sum of $11,360.00 The Government will contribute 75 percent of the fixed unit costs as work is performed, in a total sum not in excess of $8,520.00: *Provided,* That until the Operator has rendered to the Government his final report, and any final auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of 10 percent of the estimated total cost of the work. The Government will make its contribution on the basis of the monthly vouchers referred to in Article 6(b), but all payments by the Government are provisional only, subject to audit, until the account between the Operator and the Government is finally audited and settled. To the extent that excesses over fixed unit costs or any excess over the estimated total cost may be necessary for the performance of the work, the Operator shall incur and pay such excesses for his own account without contribution by the Government. The Government may make payments directly to independent contractors and suppliers for the account of the Operator rather than to the Operator.

ARTICLE 6. *Reports, accounts, audits.*—(a) *Operator's records.*—The Operator shall keep suitable records and accounts of the units of work performed and of any production in which the Government may have an interest; and shall preserve those with respect to work performed for at least three years after final payment by the Government, and those with respect to production for at least three years after any obligation to pay royalties to the Government has terminated. The Government may inspect and audit said records and accounts at any time, either by itself or by a certified public accountant. The Comptroller General of the United States or his representative, until the expiration of said three-year periods, shall have access to and the right to examine any pertinent books, documents, papers, and records of the Operator. All of the Operator's vouchers and records and accounts relating thereto and the Government's payments thereof remain subject to adjustment until final audit by the Government.

(b) *Progress reports and vouchers.*—The Operator shall provide the Government with five copies of monthly progress reports in three sections as follows: (1) Operator's Monthly Report and Voucher showing a detailed statement of units of work performed during the reporting period; (2) Operator's Unit Cost and Progress Report showing the various types of work performed during the reporting period and the fixed unit costs incurred for each type of work; and (3) a Narrative Report of the work

performed during the reporting period including adequate engineering-geological maps or sketches, drill hole logs and locations, and assay reports on samples taken concurrently with advance in mineralized ground. (Forms for reporting under (1) and (2) above will be provided by the Government.)

(c) *Final report.*—Upon completion of the work or termination of the Government's obligation to contribute to costs, the Operator shall furnish the Government with five copies of a final report (in addition to the final progress report and voucher). This final report shall include a geological and engineering evaluation of the results of the work performed under the contract with an estimate of the ore reserves resulting from such work, complete assay data, adequate geological and engineering maps or sketches, and a summary of the work performed and the unit costs thereof.

(d) *Report of sales.*—The Operator shall provide the Government with suitable accounting and documentary evidence covering all production to which the Government's percentage royalty relates, such as copies of smelter or concentrator settlement sheets, and certified accounts of production and sale or other disposition of production.

(e) *Compliance with requirements.*—If in the opinion of the Government any of the Operator's reports, records, or accounts are insufficient or incomplete, or if the Operator fails to make them, the Government may procure the making or completion of such with suitable attachments as an expense of the work to which the Operator shall contribute. The Government may withhold approval and payment of any vouchers relating to insufficient or incomplete reports, records or accounts.

ARTICLE 7. *Repayment by Operator.*—(a) *Certification.*—If the Government considers that a discovery or development from which production may be made has resulted from the work, the Government, at any time not later than six months after a sufficient final report and final account (see Article 6) has been rendered, may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development.

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

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

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

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

One and one-half (1½) percent of amounts ("gross proceeds" or "value") not in excess of eight dollars ($8.00) per ton of production in the form in which sold, held, or used, plus one-half (½) percent for each additional full fifty cents ($0.50) by which such amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such amounts.

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

(f) *Time for computation and payment.*—The Government's royalty shall be computed and paid currently upon each lot sold, held, or used in integrated operations, as the case may be, as above provided in this article.

(g) *Lien for payment.*—To secure the payment of its percentage royalty, there is hereby granted to the Government a lien upon the land or the Operator's interest in the land and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

(h) *Notice to purchasers.*—The Operator shall give notice of the Government's claim for royalty to any purchaser of the production, and shall authorize and direct such purchaser to pay the royalty directly to the Government and to furnish the Government with copies of the settlement sheets. If the records of any production and sales or other disposition of production, whether the production is by the Operator or by others, are not made available to the Government, the amount of the royalty may be estimated by the Administrator, Defense Minerals Exploration Administration, or his successor, and his estimate thereof shall be final and binding upon the Operator.

(i) *No obligation to produce.*—Nothing in this contract is to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any production operations.

(j) *Government not obligated to buy.*—Nothing in this contract shall be construed as imposing any obligation on the Government to purchase any minerals mined or produced from the land.

ARTICLE 8. *Termination of the Government's obligations.*—(a) If in the opinion of the Government operations at any time have failed to achieve anticipated results that indicate the probability of making a worthwhile discovery, and in the opinion of the Government further operations are not justified, the Government may give the Operator written notice thereof, and thereupon the Government shall be free of all obligation to pay on account of units of work not then performed, and the Operator shall be free of all further obligation to prosecute the work other than such as may be necessary and incidental to winding up, reporting, and accounting.

(b) If in the opinion of the Government the Operator is in any manner in default under the terms of the contract, the Government may give the Operator written notice of such default with a specification of reasonable time within which the default must be cured; and if the Operator fails to cure such default as required, thereupon the Government shall be relieved of all obligation to pay on account of units of work not performed when the notice was given, and the Operator shall be free of all obligation to prosecute the work other than such as may be necessary and incidental to winding up, reporting, and accounting. The remedy provided for the Government in this paragraph "(b)" is in addition to any other remedy provided in this contract, and in addition to any other remedy the law may provide for breach of contract.

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

ARTICLE 9. *Notices to be given by the Government* may be delivered to the Operator, or may be sent by registered mail addressed to the Operator at his mailing address stated in this contract. If mailed, notices are deemed to have been delivered five days after the date of mailing.

ARTICLE 10. *Officials not to benefit.*—No member of or delegate to Congress or resident commissioner shall be admitted to any share or part of this contract or to any benefit that may arise therefrom; but this provision shall not be construed to extend to this contract if made with a corporation for its general benefit.

ARTICLE 11. *Changes and added provisions.*—

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—70618-1

EXPLORATION PROJECT CONTRACT
PETERSEN, LOWE, BUSH & CAMPBELL
DOCKET NO. DMEA 3478

ANNEX I

The land referred to in Article 2 of the contract form is described as follows:

Two unpatented lode mining claims located in the Reese River Mining District, Lander County, Nevada, on the east flank of the Desatoya Mountains and about 36 miles northwesterly from the County Seat at Austin. The location notices are on record in the Court House, as follows:

Claim Name	Book No.	Page No.
Last Chance No. 1	J	279
Last Chance No. 2	J	280

A one-half interest in the above-named claims is owned by the applicants (Petersen, Lowe, Bush and Campbell), and a one-half interest by Mr. Jack Stoner, Battle Mountain, Nevada. Mr. Stoner has made an Affidavit giving his consent to Messrs. Lowe, Bush and Campbell to apply for an exploration loan to the Defense Minerals Exploration Administration; he has also signed an "Owner's Consent to Lien," naming Messrs. Petersen, Lowe, Bush and Campbell as the operators.

EXPLORATION PROJECT CONTRACT
PETERSEN, LOWE, BUSH & CAMPBELL
DOCKET NO. DMEA 3478

EXHIBIT "A"

Description of the Work

Figures accompanying this exhibit are as follows:

Figure 1, Shows location of property

Figure 2, Plan and cross-section with contours, mineralized area and location of proposed trenches.

The work is divided in two stages as follows:

Stage I

Drill, blast and bulldoze four trenches approximately in location and lengths indicated on Fig. 2, with a total trench length of approximately 290 feet, and each trench to be 10 feet wide and 4 feet deep. The total excavation will be approximately 12,000 cubic feet, allowing for entry in and out of trenches.

Trenches to be assayed for manganese and silica at approximately 10-foot intervals.

Stage II

If, in the opinion of the Government, the results of Stage I warrant further work, Stage II shall be performed if approved by the Field Team.

Trench No. 3 (Fig. 2) shall be deepened from 4 feet to 20 feet, over a length of 50 feet and width of 10 feet, by drilling, blasting, and bulldozing. The total excavation will amount to approximately 14,000 cubic feet, allowing for entry in and out of trench.

Trench to be assayed for manganese and silica at approximately 10-foot intervals.

Estimated Cost of the Project

Fixed Unit Costs

Stage I

12,000 cubic feet of excavation at $0.35/cu. ft.	$4,200.00	
Assaying, 30 samples for manganese and silica at $4.00/each	120.00	
Total cost of Stage I		$4,320.00
14,000 cubic feet of excavation at $0.50/cu. ft.	7,000.00	
Assaying, 10 samples for manganese and silica at $4.00/each	40.00	
Total cost of Stage II		7,040.00
Total cost of project		$11,360.00
Government participation, 75 percent		$8,520.00

R M E a

Docket

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

1605 Evans Avenue
Reno, Nevada

March 15, 1955

Memorandum

WSay

To: George C. Selfridge, Chairman, Operating Committee, DMEA Interior Building, Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region II

Subject: Docket No. DMEA-3478 - Manganese
Peterson, Lowe, Bush & Campbell
Last Chance Mine
Lander County, Nevada

Reference is made to your letter of February 28, 1955 requesting information on above subject application for a DMEA loan.

Attached are two copies of Settlement and Acceptance sheets on the 55.3 long tons of ore shipped to the Wenden, Arizona stockpile. Attached to the sheets is a letter from C. H. Schack to the General Services Administration giving results of beneficiation tests on the shipment.

The results on the beneficiation work were very encouraging, and it appears that by some selection ore that will meet GSA specifications can be mined. The results from tests here were not so good. The silica on concentrates from the various tests ranged from 17.5 to 24.5 percent. On the other hand, the sample beneficiated here was a composite of the engineer's field samples and probably contained highly siliceous rock that could be discarded in the process of mining. In addition, there is always a possible market for higher siliceous content ores at Ironton, Utah than those that meet GSA specifications.

I believe that a modified project as set up in the Field Team's report of January 17, 1955 has sufficient merit to justify a contract.

S. Ricker

S. Ricker

Attachments

UNITED STATES
DEPARTMENT OF THEINTERIOR
BUREAU OF MINES
1600 East First South Street
Salt Lake City 1, Utah

C O P Y

October 4, 1954

Mr. Robert B. Bradford
General Services Administration
49 Fourth Street
San Francisco 3, California

Re: Wenden Purchasing Depot
Lot 9-478-1, William V. Bush
Last Chance No. 1 mine

Dear Mr. Bradford:

This letter report will give you pertinent data obtained from testing of the 55.30-ton lot (9-478-1) of manganese ore shipped by William V. Bush on certificate 9-478.

The ore sample tested assayed 29.2 percent Mn, 1.2 percent Fe, 44.6 percent insoluble, 1.7 percent CaO, 0.01 percent Pb., 0.03 percent Zn, and 0.02 percent Cu. A microscopic examination showed that this sample contains pyrolusite and wad in a gangue composed of quartz, feldspars, chalcedony, limonite, and calcite.

By flotation of the manganese minerals, 91.2 percent of the manganese was recovered in a product assaying 45.2 percent Mn, 14.1 percent SiO_2, 0.8 percent Al_2O_3, 1.65 percent Fe, 0.09 percent P, and 0.06 percent combined Pb plus Zn plus Cu. The manganese product met all chemical specifications of the manganese purchasing program.

If Mr. Bush continues to ship the same quality ore from the Last Chance No. 1 mine, it is recommended that the results of the testing be used in calculating the payment due for ore assaying between 26.5 percent and 32.0 percent Mn. Higher or lower grade ore than covered by the range tested would require new flotation study as would ore of different physical composition.

Please advise us if you have any questions concerning the data given in this letter.

Sincerely yours,

/s/ C. H. Schack
C. H. Schack, Acting for
J. Bruce Clemmer, Chief
Metallurgical Division
Region IV

C O P Y

SERVICES ADMINISTRATION
S PURCHASE DEPOT
WENDEN, ARIZONA
ACCEPTANCE

DATE: 11/12/54

ACCEPTANCE NO.: 2216

CONTRACT NO.: 9-41-1

MIN: First Chance, Calif.

RECEIPT & WEIGHT TICKET NO.: 2216

Walter V. Cash
[illegible] Sheridan Ave
Garden Grove, California

Subject to terms and conditions of Manganese Regulations as amended, establishing the Government's Purchase Program for Domestic Manganese Ore at Wenden, Arizona, the Government accepts manganese ore delivered by you at Purchase Depot, Wenden, Ariz., as follows:

Net Pounds: 129,400 2.0 % H_2O

Manganese (Mn) Content Dry Basis %

Weight lbs.

Less % Moisture lbs.

Net Dry Weight lbs.

Long Dry Tons

Payment Based on Itemized SCHEDULE
GROSS PAYMENT
$ x L.D.T. = $

Nodulizing Charge
$ x L.D.T. =

Net Payment $

Supplemental and/or Final Payment Based on Regulation and all Amendments thereto.

CHARACTERISTICS	Recovery	
Manganese (Mn)		91.2 %
Iron (Fe)		4.2
Silica plus Alumina ($SiO_2 + Al_2O_3$)		1.5
Phosphorus (P)		31.9
Copper plus Zinc plus Lead (Cu + Zn + Pb)		0.09
		0.05 %

BASE PRICE per L.D.T. UNIT						$ 2.30
Premiums						
Manganese		x	$.005	=	$	
Iron	4	x	$.005	=	$ 0.02	
Net increase						$ 0.02
Penalties						
Manganese	2	x	$.01	=	$ 0.02	
Manganese		x	$.015	=	$	
Iron		x	$.01	=	$	
Iron		x	$.0075	=	$	
Silica plus Alumina	1.5	x	$.01	=	$ 0.02	
Phosphorous		x	$.0033	=	$	
Net Decrease						$ 0.07

Net Amount of Adjustments — Plus $ 0.02 — Minus $ 0.07

Adjusted Base Price per L.D.T.U. = $ 2.25

L.D.T. CRUDE ORE		% Mn in Crude Ore		% Mn Recoverable		L.D.T.U. MN RECOVERABLE
64.70	x	29.2	x	91.2	=	172.65

L.D.T.U. MN RECOVERABLE		Adjusted Base Price		
172.66	x	$ 2.25	=	$ 333.49

Deductions For Cost of Milling and/or Nodulizing

L.D.T. CRUDE ORE			
65.30	30.00	=	$ 1959.00

Total Amount Payment	$ 2292.49
Total Schedule Payment Made	$ 2292.49
Net Amount Due Producer	$ 2292.49
Net Amount Due Government	$ 65.73

Bureau of Mines General Services Administration

Signature: [illegible]
Name: Glenn H. Kinson Title: [illegible] Date: 11/12/54

Signature: [illegible]
Name: A. Earl Johnson Title: [illegible] Date: 11/12/54

To General Services Administration
49 - 4th St., San Francisco 3, California

FOR USE PRODUCER

INVOICE

For Manganese Ore delivered as indicated above $ _____

I certify that above bill is correct and just and that payment therefor has not been received. The producer warrants that said ore was mined in United States, its Territories or Possessions.

Producer _____ Date _____

By _____
NAME AND TITLE

GPO 038470

RD-339 (9-13-54) C1 6-A

GENERAL SERVICES ADMINISTRATION
MATERIALS PURCHASE DEPOT, WENDEN, ARIZONA

DATE: October 4, 1954

ACCEPTANCE NUMBER: 2446

ISSUED UNDER CERTIFICATE OF AUTHORIZATION NUMBER: 9-478-1

ACCEPTANCE

TO

William V. Bush
12112 Sheridan Lane
Garden Grove, California

Last Chance #1, Californi
RECEIPT AND WEIGHT TICKET NO.
2842

Subject to the terms and conditions of the Manganese Regulation, as amended, establishing the Government's Purchase Program for Domestic Manganese Ore at Wenden, Arizona, the Government accepts 126400 pounds (wet basis) of manganese ore, delivered by you at the Purchase Depot, Wenden, Arizona, and covered by Receipt No. see above. Such ore has a moisture content of 2.0 % and analyzes on a dry basis as follows:

		PERCENT
MANGANESE (Mn) CONTENT		29.2
WEIGHT	POUNDS	
WET BASIS	126400	
LESS MOISTURE 2.0 %	2528	
		L. D. T.
NET DRY BASIS	123872	55.30

EVALUATION AND SETTLEMENT DATA

GROSS PAYMENT $ 38.88 X 55.30 L. D. T. 2094.76
DEDUCTION FOR NODULIZING $ X L. D. T.
NET PAYMENT 2094.76

BUREAU OF MINES — Glenn M. Hanson RR (Signature) — Metallurgist (Title)
(Name) Glenn M. Hanson — Bureau of Mines Representative

GENERAL SERVICES ADMINISTRATION — A. Earl Johnson RR (Signature) — Manager (Title)
(Name) A. Earl Johnson — Materials Purchase Dept.

(FOR USE OF PRODUCER ONLY)

INVOICE

TO: GENERAL SERVICES ADMINISTRATION—REGION 9
49 Fourth Street, San Francisco 3, Calif.

FOR: MANGANESE ORE delivered as indicated above $ _____

I certify that the above bill is correct and just and that payment therefor has not been received. The Producer warrants that said ore was mined in the United States, its Territories or Possessions.

Producer _____ Date _____

By _____ Title _____

Form R9-308 (3-26-53)

GPO 966974

DOCKET
Surname:
Chapman
Martin
Selfridge
Johnson
Mittendorf

FEB 28 1955

Mr. Spangler Rieker, Executive Officer
DMEA Field Team, Region II
420 Custom House, 555 Battery Street
San Francisco 11, California

Re: Docket No. DMEA 3478-Manganese
Peterson, Lowe, Bush & Campbell
Last Chance Mine
Lander County, Nevada

Dear Mr. Rieker:

With reference to the merits of the above-noted property, we find that the main point of discussion is the high silica content of the ore.

In the Field Team's report we note that the 55.3 long tons of ~~that~~ that were shipped to Wenden, Arizona, ran 29.2 percent manganese, and the net settlement was $2,094.76. No mention is made of the silica content or at what rate the settlement was made, and, if possible, we would appreciate your obtaining for us a copy of the settlement sheet.

We note that the Bureau of Mines' ore testing laboratory made an 82 percent saving and a concentrate containing 39 percent manganese, by sink-float, on an ore containing 18.9 percent manganese and 59.2 percent silica. However, no mention is made of the silica content of the concentrate. We would also appreciate your obtaining the corresponding assay for us.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (SHB)

Approved:

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

Thor H. Kiilsgaard
Member, Geological Survey (SHB)

cc: Docket
FT, Reg. 2-S. F.
Code 400
Adm. Read. File
Oper. Committee
G. DeHuff, USBM
T. Kiilsgaard, USGS

TLChapman/WSMartin/ls
2-24-55

R.C.B.

Docket

IN REPLY REFER TO:

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 17 1955

February 17, 1955

Corr. refined 400

Memorandum

WSM

To: W. S. Martin, Defense Minerals Exploration Administration

From: Louis Pavlides, U. S. Geological Survey

Subject: DMEA Docket 3478 -- Manganese, Petersen, Lowe, Bush and Campbell, Last Chance Mine, Lander County, Nevada

The examining Field Team has submitted a report recommending a two stage exploration program consisting of 340 linear feet of trenching at a total cost of $9,118.80. The first stage calls for 290 linear feet of trenching, across a manganiferous shale layer, to be distributed between 4 cuts as indicated in Figure 2 of the Field Team report. The trenches are to be 10 feet wide and 4 feet deep. The second stage in the program calls for deepening one of the trenches (No. 3) to a depth of 20 feet "in further exploring the depth of the manganese deposit." The contribution of stage 2 in realistically testing the depth of the deposit by cutting down an additional 16 feet is questioned and I believe it should be eliminated from the exploration proposal if a contract should be approved. However, in view of the small reserves inferred, namely, 16,000 tons averaging around 18.9% Mn and 59.2% SiO_2 and the limited possibilities of economically obtaining concentrates from the manganiferous chert and shales of this deposit which will meet minimum stockpile specification, it is recommended that the request for aid in exploration be denied.

Louis Pavlides

Louis Pavlides

Supplementary acceptance
sheet of GSA not in
Washington. Effort was made
get copy through Mr. Jacoman
or Field Team from Warden.

2/8/55
JAR

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

RECEIVED

420 Custom House
555 Battery Street
San Francisco 11, Calif.

January 25, 1955

Memorandum

To: George C. Selfridge, Chairman, Operating Committee, DMEA
Interior Building, Washington 25, D. C.

W3M

From: Executive Officer, DMEA Field Team, Region II

Subject: Docket No. DMEA-3478 - Manganese
Petersen, Lowe, Bush, and Campbell
Last Chance Mine
Lander County, Nevada

Reference is made to your letter of October 21, 1954, in which you requested a field examination of the subject property.

Attached are four copies of the examination report dated January 17, 1955, and submitted by Ralph J. Roberts and Robert Lehner, Geologists, U. S. Geological Survey, and Glenn G. Gentry, Mining Engineer, U. S. Bureau of Mines.

A project consisting of 340 linear feet of trenching at a total cost of $9,118.80, of which the Government participation would be $6,839.10, is recommended in the report. By surface sampling the expected grade of ore would be 18.9% Mn and 59.2% SiO_2.

On a basis of proving up a small tonnage of low-grade siliceous manganese ore for the purpose of increasing domestic reserves, the project is justified. It is doubtful, however, if the 16,000 ton objective, if fully developed, could be economically beneficiated and marketed. I believe the Wendon stockpile specifications require a minimum of 15% Mn content and a maximum of 15% SiO_2. From test work done by the Bureau of Mines on this and similar types of Nevada ores we question if Government stockpile specifications could be economically met.

Reviewed by
DMEA OPERATING COMMITTEE
2-4-55
(date)

Now we can
ask what the
Commodity men
think about this –
start with survey –
wait for policy decision
before asking Bur. Mines.

2/7/55

WSay

I have discussed this project with H. K. Stager (acting for Roscoe Smith) and we both recommend a small project under the first condition but cannot approve one if the sole object is to find marketable ore under present prices and economic conditions.

It is also questionable in our minds whether such complete analyses of the samples as shown in this report are necessary, and while we do not wish to discourage detailed investigation, we will discuss with our engineers and geologists the merit of composite samples in some cases for minor constituents.

S. Ricker
Executive Officer
DMEA Field Team, Region II

Attachment

Copy to: Roscoe Smith, USGS
A. C. Johnson, Reno

Department of the Interior
Defense Minerals Administration
RECEIVED
JAN 31 1955

ON-S.YE Report.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

DMEA-3478, Last Chance Manganese Mine

Lander County, Nevada

Ralph J. Roberts, Geologist
Robert Lehner, Geologist
U. S. Geological Survey

Glenn G. Gentry, Mining Engineer
U. S. Bureau of Mines

January 17, 1955

Reviewed by
DMEA OPERATING COMMITTEE
2-4-55
(date)

EXAMINATION REPORT

DOCKET NO.: DMEA-3478 (Manganese)

Name and address of applicant: William L. Petersen, William H. Campbell, R. Allen Lowe and William V. Bush
Austin, Nevada

Name and location of property: Last Chance Mine, Lander County, Nevada

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

On August 24, 1954, the above named persons applied to the Defense Minerals Exploration Administration for financial assistance in the amount of $72,580.46 to be used for the purpose of exploring an exposure of manganese ore on the Last Chance lode mining claims situated in Lander County, Nev.

Pursuant to receipt of this application, the Last Chance manganese mine was examined, mapped and sampled on November 16 and 17, 1954. A conference was also held with the applicants in Austin, Nevada on the morning of November 18, 1954.

The surface exposures of manganese ores on the Last Chance claim indicate that additional exploration by means of trenching is justified in order to determine the extent, direction and grade of the ore over a greater area than can be inferred at this time.

The examining engineer and geologists recommend that the DMEA enter into an exploration contract with the applicants to consist of 340

linear feet of trenching at a total cost of $9,118.80. Government participation at 75% would amount to $6,839.10

During the examination and sampling of the property on Nov. 16 and 17, 1954, the examining engineer and geologists were accompanied by Messrs. Petersen, Lowe, Bush and Campbell, and these gentlemen were also present during the discussion of their proposal on the morning of Nov. 18, 1954 in Austin, Nev.

NAME AND LOCATION OF PROPERTY

The Last Chance Mine is located in the Reese River Mining District, on the east flank of the Desatoya Mountains and near the west central boundary of Lander County, Nev.

The mine is reached by traveling west from Austin, Nev. via U.S. Highway 50 for a distance of 15.2 miles, thence in a northwesterly direction via an unimproved desert road for a distance of 20.6 miles.

The mining claims are unsurveyed and the township, range and section could not be established.

ACCESSIBILITY

From Austin, Nev., the 15.2 miles via U. S. Highway 50 is over an all weather road which is maintained by the Nevada State Highway Department. From this highway to Warm Springs, a distance of 14.8 miles, the desert road is maintained by the Lander County road maintenance crews as time, money and equipment are available. From

Warm Springs to the mine, a distance of 5.8 miles, the road is maintained by the mining company. Therefore, the total road from U. S. Highway 50 to the mine will be impassable at times during the winter months, as severe snow storms and high winds are to be expected.

COMPETENCY OF APPLICANTS

The applicants appear to have sufficient general mining and construction experience to properly conduct the proposed exploration. Mr. W. L. Petersen, who will actively supervise the operations, has had many years practical mine operating experience in Nevada and developed and operated the Black Rock manganese mine, in this same area, during the period of World War II. The applicants report that they have sufficient funds on hand with which to pay for their share of the exploration cost.

APPLICANTS PROPERTY RIGHTS

The Last Chance No. 1 and Last Chance No. 2, lode mining claims, are held by right of location and were recorded on June 17, 1938, in Book "J" of mining locations, page 279 and 280, Records of Lander County, Nevada at Austin, Nev.

The applicants own an undivided one-half interest in these mining claims. The remaining one-half interest is owned by Mr. Jack Stoner of Battle Mountain, Nev., who has executed the following affidavit, dated August 19, 1954, which reads in part:

"That I hereby consent to the owners of the other undivided one half interest, namely: William V. Bush, R. Allen Lowe and William H. Campbell, making application for aid under the Defense Minerals Exploration program for the exploration of said claims for manganese. (signed) Jack Stoner."

This affidavit does not list Mr. W. L. Petersen as one of the owners of the property and it is probable that "Owners Consent to Lien" should be obtained from Mr. Stoner prior to the execution of an exploration contract.

DESCRIPTION OF PROPERTY

Surface and surface facilities: The overburden has, in part, been removed by means of a bulldozer. The property is considered as a prospect and no facilities are presently on hand or installed.

Mine workings: The underground workings consist only of one shallow, inclined adit about 10 feet in length and only slightly under the surface. There are no underground facilities.

Existing development: Development has consisted in cutting several bulldozer trenches during the removal of the overburden and in excavating the shallow, inclined adit.

GEOLOGY

The Last Chance claims are underlain by interbedded chert and shale of probable upper Paleozoic age which crop out on a low knoll on the east flank of the New Pass Destoya Mountains. On the north, east,

and south, the chert and shale are overlapped by volcanic rocks of Tertiary age, and on the west by gravels of Quaternary age.

The chert and shale unit is the host rock of the manganese ore bodies. The chert is thin-bedded; the beds range from 2 to 18 inches in thickness and are commonly separated by shaly partings. Medium to dark greenish gray chert is most abundant although some black and brown chert beds were noted. On weathered surfaces, the chert is stained by manganese and iron oxide. The chert generally weathers to smooth slopes except locally where discontinuous ledges are as much as 5 feet high. The shale that is interbedded with the chert is also medium to dark gray and contains thin chert layers in places. Near the manganese ore bodies the chert and shale are argillized and leached. A chert conglomerate unit is poorly exposed on the east side of the ridge; it appears to be interbedded with the upper chert layers.

The chert and shale generally strike northward and dip 20°-~~6°~~ 40° E.; on the south, the dip flattens to about 10° E. Locally the beds are completely folded, overturned, and greatly fractured. These rocks have been cut by two sets of faults: One set strikes northward; the other set strikes eastward. One of the north-striking faults contains manganese oxides, and was the source of part of the ore shipped.

The volcanic rocks of Tertiary age that are present to the north, east and south of the hill consist of a basal obsidian that grades upward

into dense quartz latite. These rocks strike northward and dip 15°-25° E. and overlap the chert and shale unit.

ORE DEPOSITS

The manganese ore at the Last Chance claims is in a shale unit about 50 feet thick overlain by thin-bedded chert and underlain by a thick-bedded chert unit. The manganiferous material is distributed throughout the shale in layers and pods that in general parallel bedding, but locally follow faults and fractures.

The ore minerals include psilomelane and pyrolusite-type oxides, and some soft, earthy wad. These minerals were probably formed from the alteration of other manganese minerals, possibly primary manganese carbonates, and represent secondary concentration by weathering processes. The secondary minerals follow bedding for the most part, and form pod-like bodies a fraction of an inch to four feet or more thick. In places, these bodies are composed mainly of manganese oxides, but generally they contain altered shale and chert layers and fragments. Three or more parallel layers of manganiferous material separated by barren shale and chert were noted in the two northern open cuts. Manganese oxides were also localized along faults and fractures. The most notable fault occurrence is in the open pit at samples 1451-1453 where manganese oxides form a body 3 feet wide on the hanging wall side of the fault and veinlets extend 5 feet or more into the hanging wall. This pit is the source

of most of the ore (55 tons containing 29.2 percent Mn) that was shipped to Wenden, Arizona. The displacement on the fault is uncertain, but is believed to be small.

The manganese showings are exposed at intervals in trenches for a total strike length of about 400 feet, but the principal showings are in the northern 300 feet of this distance. Because much of the manganiferous shale unit is covered by debris scraped from the bulldozed area, no clear idea could be obtained concerning the proportion of manganiferous material in the shale unit. There are also poorly exposed showings of manganiferous material in the two pits on the south. It is not known whether the showings are continuous with the northern body as the intervening ground is largely covered.

ORE RESERVES

Because the manganiferous layer is poorly exposed, the ore reserves cannot be calculated with any accuracy. A few tons of measured ore can be seen in the workings, and ore is indicated below the open cuts and pits. It is inferred, however, that manganiferous material will extend along strike and down dip from the present showings, and the outlook for the discovery of additional reserves seems good. In the northern block, 300 feet long, it is inferred that the minable ore may aggregate about 8 feet in average thickness and extend down dip for 100 feet or more. This will correspond to about 16,000 tons of inferred ore. It

is expected that dilution during mining may reduce the recoverable tonnage to 10,000 or 12,000 tons of material suitable for concentration (Mn 15-30%). As the depth of oxidation is not known, no attempt will be made to calculate reserve tonnage below 100 feet down dip, although it is likely that ore may extend below this point. Additional manganiferous material may also be available in the south pits, but at the present time there is no way to appraise the tonnage available there.

SAMPLING

Sample No.	Width, feet	Percent							Oz/T	
		SiO_2	Mn	P	Fe	Pb	Cu	Zn	Au	Ag
BM-1448	3.2	56.25	19.1	0.051	2.81	*0.01	0.12	0.1	Tr.	Tr.
North Pit, black manganese with streaks of cherty gouge.										
BM-1449	3.8	61.48	14.0	0.053	1.86	*0.01	0.08	0.1	Tr.	Tr.
Northwest face of pit; 83 feet south of Sample 1448.										
BM-1450	3.4	75.53	16.1	0.026	2.87	*0.01	0.12	0.1	Tr.	Tr.
East face of pit; 31 feet south of Sample 1449.										
BM-1451	6.0	42.87	29.5	0.035	2.20	*0.01	0.18	0.1*	Tr.	Tr.
West side of 17-foot adit; 4 feet back of face.										
BM-1452	4.7	61.33	20.2	0.033	1.96	*0.01	0.10	0.1*	Tr.	Tr.
Face of 17-foot adit.										
BM-1453	4.3	37.02	28.3	0.046	2.48	*0.01	0.20	0.1	Tr.	Tr.
Portal of adit; 3 feet below surface.										
BM-1454	4.3	49.20	25.5	0.021	2.29	*0.01	0.17	0.1	Tr.	Tr.
North face of open cut.										
BM-1455	26.0	81.58	6.6	0.036	4.00	*0.01	0.11	0.1	Tr.	Tr.
Chip sample across face of exposure 56 feet south of open cut and sample No. 1454; mostly jasper-quartz and chert.										

Sample No.	Width, feet	Percent SiO_2	Mn	P	Fe	Pb	Cu	Zn	Oz/T Au	Ag
BM-1456	4.0	63.14	16.2	0.069	3.72	*0.01	0.14	0.1	Tr.	Tr.
Trench in road; 93 feet west of sample No. 1449.										
BM-1457	3.8	63.69	12.3	0.021	2.60	*0.01	0.12	0.2	Tr.	Tr.
North side of cut on road; 73 feet east of sample No. 1456.										
BM-1458	2.5	54.84	21.0	0.077	2.08	*0.01	0.14	0.1	Tr.	Tr.
East face of open cut; 12 feet from sample No. 1448.										
BM-1459	5.5	78.07	9.5	0.022	2.68	*0.01	0.07	0.1	Tr.	Tr.
Surface exposure S. 15° E - 49 feet from sample No. 1450.										
BM-1460	5.0	55.05	21.5	0.027	2.28	*0.01	0.17	0.2	Tr.	Tr.
Surface exposure S. 20° E - 31 feet from sample No. 1459.										
BM-1461	7.0	64.91	14.5	0.035	3.31	*0.01	0.08	0.2	Tr.	Tr.
Surface exposure in road N. 25° W - 89 feet from sample No. 1448.										
BM-1462	2.5	68.56	8.7	0.029	2.25	*0.01	0.06	0.1	Tr.	Tr.
North bank of shallow trench N. 15° W - 17 feet from sample No. 1457.										
BM-1463	3.7	34.44	34.1	0.023	2.20	*0.01	0.14	0.2	Tr.	Tr.
South bank of dozer cut S. 25° W - 14 feet from sample No. 1454 - same cut as sample No. 1454.										

*=less than.

PAST OPERATION

Operations during the past year have consisted of scraping the overburden from an area about 700 feet in length and about 200 feet in width, cutting several shallow bulldozer trenches and excavating a shallow inclined adit.

Production is reported as 55.3 long, dry tons of 29.2 percent manganese ore having a net value of $2,094.76. This ore was shipped by William V. Bush to the purchase depot at Wenden, Arizona and the settlement sheet is dated October 6, 1954.

LABOR AND SUPPLIES

Experienced miners can usually be obtained either in Austin, Nevada or in Eureka, Nevada, which is approximately 70 miles east of Austin. The usual mining supplies and a small amount of equipment are also usually available in the stores in Austin. There is no water at the mine and water for mining and or domestic uses would have to be hauled from Warm Springs a distance of 5.8 miles from the mine. There is no transmitted electric power in the district and all mining equipment would be operated by either Diesel or gasoline motors. Miners wages in this area are approximately $2.00 per hour.

APPLICANTS PROPOSAL

The applicants original proposal consisted of a rather indefinite exploration by means of three churn drill holes to an approximate depth of 150 feet each; approximately 155 feet of bulldozer cuts or benches; and the erection of a bookhouse and equipment, two bunk houses, powder magazine and tool shed. The applicants estimate of costs for the project amounted to $72,580.46.

The examining engineer and geologists consider the Last Chance mine to have sufficient merit for a moderate exploration program and propose the following:

Stage I:

Exploration by means of trenching the mineralized

area a total of 290 linear feet. The trenches (fig. 2) are to be 10 feet in width by 4 feet in depth.

Estimated cost of Stage 1 . . . . . $7,777.80

Stage II:

If Stage I is successful, Stage II is proposed to deepen trench No. 3 from a depth of 4 feet to a depth of 20 feet and a length of 50 feet in further exploring the depth of the manganese deposit. Stage II not to be undertaken without prior, written approval by the Government.

Estimated cost of Stage II $1,341.00

Total costs of Stages I and II $9,118.80

Government participation @ 75% = $6,839.10

The costs submitted by the applicants have been reviewed and appear to be reasonable, however, the examining engineer has prepared a separate cost estimate which is recommended to be followed. Due to present and expected weather and road conditions, it appears doubtful that an exploration project could be started prior to May 1, 1955.

The exploration as proposed by the examining engineers is expected to be completed within a period of two months, thereby being concluded by July 1, 1955. The exploration program as recommended was discussed in detail with all of the applicants who have agreed to the type and scope of the work. The geologists have considered the size of

the geological target as approximately 16,000 tons of manganese ore.

Exploration by means of churn drilling and/or diamond drilling was considered and discussed and is not recommended due to the nature of the deposition and material, which indicates that core recovery would be problematical and that much better and more reliable information would be secured by means of trenching from which much better samples could be obtained.

A composite sample of the 16 samples taken by the examining engineer assayed: 18.9% Mn, 2.6% Fe, 59.2% SiO_2, 0.04% P, 0.13% Cu, and less than 0.1% Pb and Zn.

EXPLORATION PROJECT

Estimated by the Examining Engineer:

Stage I:

290 linear feet of trenching - 10 feet wide by 4 feet deep = 11,600 cu. ft. of excavation

Stage II:

50 linear feet of trenching - 10 feet wide by 20 feet deep = 10,000 cu. ft. of excavation

Total trenching: 340 linear feet - 21,600 cu. ft. of excavation

Exploration period: Estimated time required - 2 months or 60 working days

Supervision	Estimated cost Per month	2 months	Linear feet
1 superintendent @ ~~$27~~ 20/day	$ 600.00	$1,200.00	$ 2.83
1 bookkeeper	150.00	300.00	0.88
4 miners @ $15/day each	1,800.00	3,600.00	1.06
1 cat operator & maintenance man @ $28/day	840.00	1,680.00	4.94
Insurance & taxes @ 18.87%		122.28	0.36
Assaying 50 samples @ $5/ea.		250.00	0.73
			$10.80

Powder-fuse-detonators	$ 683.00	$ 2.01
Compressor supplies	415.00	1.22
Steel and bits	400.00	1.18
Estimated repairs	150.00	0.44
Truck expense - 400 gals. gas @ $0.37	148.00	0.44
Skip loader - 1200 gals. Diesel fuel @ $0.24	288.00	0.85
		$ 6.14

The operator will furnish all equipment:

	Cost	2 months rental	Linear feet
2 Schramm compressors	$ 6,000.00	$ 200.00	$ 0.59
1 Electric welder	1,000.00	33.34	0.10
1 Skip loader	7,000.00	233.34	0.70
1 Water tank, truck mounted	350.00	11.86	0.04
4 Jackhammers @ $125.00 ea.	500.00	16.66	0.05
Air hose, 400 feet	240.00	8.00	0.03
	$15,090.00	$ 503.20	$ 1.51

Truck transportation:

1 Pickup - 60 miles per day @ $0.07 per mile - 60 days =	$ 252.00	$ 0.74
1 Truck, 1-1/2 ton - 20 miles per day @ $0.14 per mile - 60 days =	168.00	0.50
		$ 1.24
Miscellaneous welding rods, etc.	$ 100.00	$ 0.29
Transportation of equipment from the town of Austin, Nevada to the mine and return to Austin	$ 500.00	$ 1.47

	Estimated cost		
	Per month	Cost	Cost per foot
New installations:			
Materials, supplies, labor for the erection of a small tool shed		$1,000.00	$2.94
			$24.39
Contingencies @ 10%			2.43
Total cost per foot			$26.82

Independent contracts: None

Total cost: $9,118.80

Government's participation @ 75% = $6,839.10

LAST CHANCE MINE
William L. Robertson, William H. Campbell,
P. Allen Lowe and Mr. V. Bush
ELKO, NEVADA

U. S. DEPT. OF THE INTERIOR
Bureau of Mines Administration
RECEIVED
NOV 30 1954

Nov. 26, 1954

Via Air Mail

Refer to A-13478

Mr. A. C. Johnson, Chief,
Mining Division, Region III,
U. S. Bureau of Mines,
1605 Evans Avenue,
Reno, Nevada.

Dear Mr. Johnson:

Following the suggestions of Mr. Glen Gentry, made at the time he visited our property on the 16th, we would like to submit in the attach d breakdowns a revised plan for the initial exploration work to be done on the Last Chance Mine. Steps No. 1 and No. 2 are included.

We wish to express our appreciation and gratitude to Mr. Gentry and to your office for the valuable assistance and advice extended to us in establishing a program for the exploration of our property, and to thank you for the courteous treatment received.

Yours very truly,

LAST CHANCE MINE

WHC/ol

William H Campbell

Enc. 3 sets of this letter with breakdowns.

LAST CHANCE MINE
William L. Petersen, William H. Campbell
R. Allen Lowe and William V. Bush
AUSTIN, NEVADA

November 26, 1954 D M E A #3478

STAGE NO. 1, Estimated costs for the initial exploration program for Last Chance Mine.

EQUIPMENT	VALUE	DEPRECIATION ALLOWANCE	TOTAL PER MONTH
2 Schram Compressors @ $3000.00	$ 6000.00	1/60th	$ 100.00
1 Electric Welder	1000.00	"	16.67
1 TD9 Skiploader/w/dozer blade	7000.00	"	116.69
1 Water tank, truck mounted	350.00	"	5.83
4 jackhammers @ $125.00 ea	500.00	"	8.33
400' Airhose @ 60¢ ft.	240.00	"	4.00
6 sets steel, 1-2' 1-4' to set @ $6.00	36.00	"	.60
16 Carbide bits @ $22.50 each	360.00	"	6.00
1 Pickup Truck ~~120~~ 60 miles day @ 7¢ mile,		15 days	63.00 ~~144.00~~
1 1-1/2 ton Truc~~75~~ 20 " " @ 14¢ "		15 days	42.00 ~~157.50~~

40-1/4 Box Powder (575 holes 4' deep x 7 sticks)	@ $25.00 box	1,006.25
575 Caps	2.00 per C	11.50
Electric wires, box etc. for detonating (estimated)		50.00

Cost for 15 days

960 Gal. Gasoline for 2 Compressors (4 gal.hr x 2 x 8 hrs)	@ 37¢ gal	355.20
150 " " P.U/ Truck 120 mi. day @ 12 mi. to gal	@ 37¢ "	55.50
150 " " 1½ T. " 75 " " @ 7½ " " "	@ 37¢ "	55.50
450 " Diesel Oil for Sk.Loader 30 gal.day	@ 24¢ "	108.00
195 Qts. Lub. Oil for above machines	@ 45¢ qt.	87.75
For repairs & Parts, estimated 25% of total of $661.95		165.48
Tool Shed		1,000.00
Miscl. Tools, welding rods, etc. estimated		50.00
Assaying, ~~xp~~ 50 samples	@ $6.00 ea	300.00
Postage	@ .50 "	25.00
Transport charges on heavy equipment to & from mine		500.00

LABOR, OVERHEAD, ETC.

4 Men @ $15.00 day for 15 days to drill 575 holes 4' deep total		900.00
1 Superintendent 15 days	@ $20.00 day	300.00
1 Cat Op./maint.man 15 " 3.50 hr	28.00 "	1420.00
Compensation Ins., w/h taxes, etc 15% of $1620.00 total		243.00
Accounting Costs		100.00
For Contingencies, 10% of foregoing total of $6292.80		629.28
Total estimated cost		~~$6,922.08~~ 6920.00

Contemplated exploration consists of running a total of 230 lineal feet of trenches, 10 feet wide, 4 feet deep; said trenches to cross-cut the property from South to North and from East to West per maps prepared by Mr. Glen Gentry. This totals 9200 cu. feet of excavation @ $0.75 per cu.ft or $300.96 per Lin.ft. In computing work progress, we would like to use the per cubic foot figure for work completed.

LAST CHANCE MINE
William L. Petersen, William H. Campbell,
R. Allen Lowe and William V. Bush

AUSTIN, NEVADA

November 26, 1954

D M E A #3478

STAGE NO. 2, Estimated costs for exploration program for Last Chance Mine, subsequent to completion of Stage No. 1.

Contemplated exploration consists of deepening the 50' trench, which runs from South to North and intersecting the 100' trench running East and West, from the 4' depth established in Stage No. 1, to a total of from 4' to 22' running through the crown of the hill for the 50' length of trench.

4500 cu.ft plus 20% for crown of hill, 5400 cu.ft. @ 75¢ $4,050.00

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
1605 EVANS AVENUE
RENO, NEVADA January 3, 1955

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 31 1955

Re-0-2.120
DMEA 3478 - Peterson-Lowe-Bush and Campbell Last Chance Mine, Lander County, Nevada (Gentry)

Concentration Tests:

A composite was made of 16 samples submitted. The ore contained Mn, 18.9 percent; Fe, 2.6 percent; SiO_2, 59.2 percent; P, 0.04 percent; Cu, 0.13 percent; Pb, less than 0.1 percent; and Zn, less than 0.1 percent.

Mineralogical examination showed manganese oxides in thin crusts in seams of the gangue, fine-grained clusters locked with gangue and disseminated extremely fine-grained manganese oxides in laminated silicious gangue. The gangue minerals were quartz, chalcedony, opaline silica, and a little calcite.

Laboratory gravity concentration equipment was not available, so a simulated gravity concentration test was made on sized portions of ore in acetylene tetrabromide, a heavy liquid with 2.9 specific gravity. The ore was crushed to minus 10-mesh and screen sized into five portions. Each portion was washed to remove slimes, and dried, then treated in the heavy liquid making sink products, or concentrates, and float products or tailings. This separation should approximate the results of treating the crushed ore, after hydraulic classification, on the laboratory Wilfley table. However, much of the manganese mineral occurred in flat, flaky grains which usually do not concentrate properly on the Wilfley table, and consequently the "sink-float" test probably indicates higher recovery than could be expected from gravity concentration in plant operation. Detailed data of this test were:

Sink-float test, Last Chance Manganese Ore

Product size-mesh	Weight, percent	Analyses - percent Mn	SiO_2	Fe	Distribution - Mn percent
Sinks					
-10+20	18.8	37.9	27.3	3.05	39.4
-20+48	12.1	40.2	23.7	2.75	26.9
-48+100	4.7	41.4	19.1	2.25	10.7
-100+200	2.2	42.0	17.2	2.80	5.1
Total sinks	37.8	39.3	24.5	2.83	82.1
Floats					
-10+20	29.3	2.4	-	-	3.9
-20+48	14.9	2.7	-	-	2.2
-48 +100	5.3	1.8	-	-	0.5
-100 +200	2.8	2.8	-	-	0.4
Total floats	52.3	2.4	-	-	7.0
-200 sands *	5.4	22.9	-	-	6.9
-200 slimes*	4.5	15.9	-	-	4.0
Total tailings	62.2	5.2	-	-	17.9
Composite	100.0	18.1	-	-	100.0

* No separation obtained in heavy liquid.

Flotation tests were made on ore ground to minus 65-mesh. Difficulty was encountered in making good grade concentrates at the same time as obtaining satisfactory recovery. By cleaning the concentrates in several stages, final concentrates containing 47 percent Mn were obtained, but recovery in this product was only 18 percent. When concentrates containing 45 percent Mn were made, recovery was 29 percent. With concentrates containing 44 percent Mn, recovery was raised to 36 percent. A recovery of 48 percent was obtained when the concentrates contained 39 percent Mn. Recovery was 69 percent when concentrates contained 37.7 percent Mn. Apparently, much of the more silicious manganese particles were difficult to float, and when floated, greatly reduced the grade of concentrates.

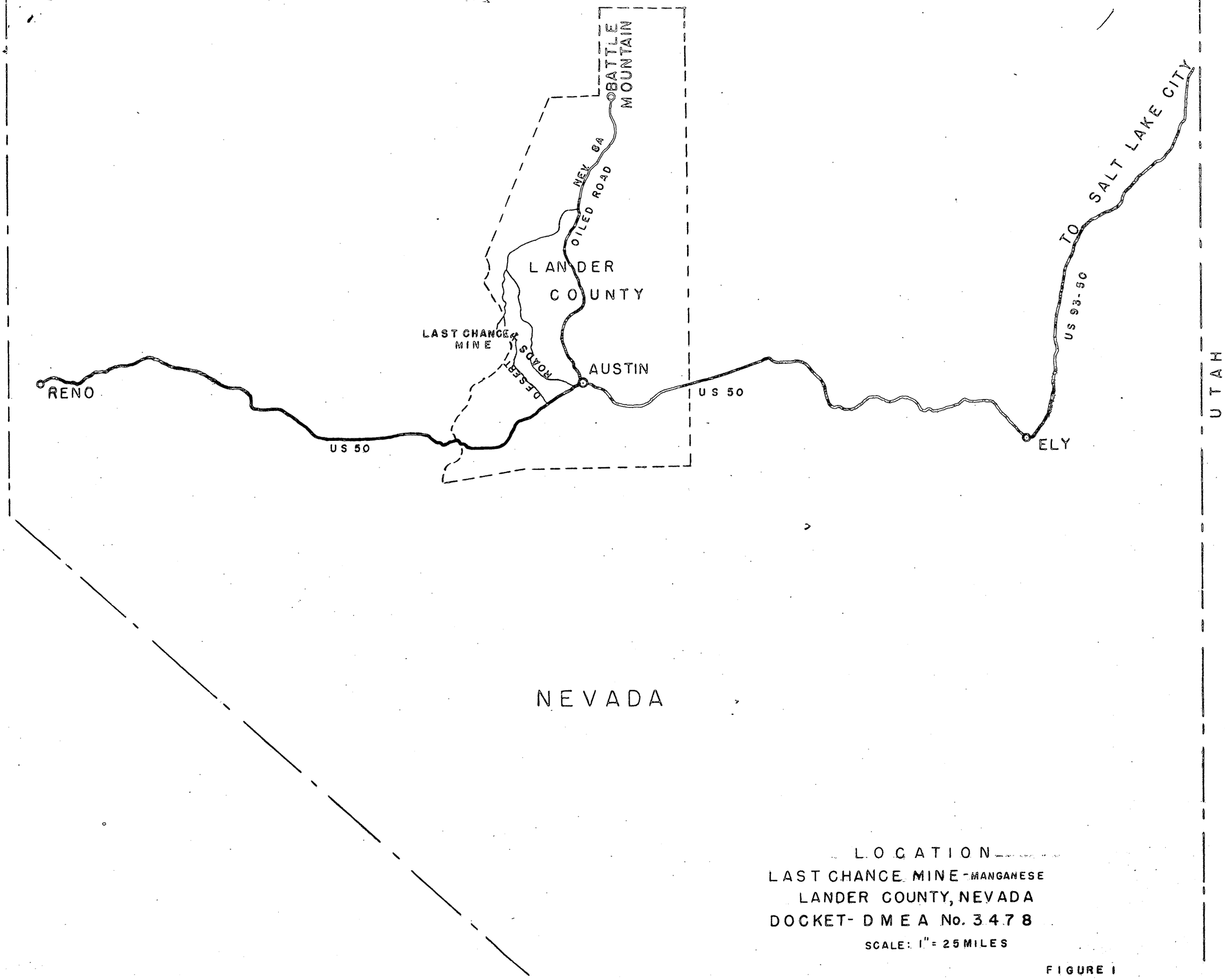
The highest recovery mentioned was obtained with the following treatment:

The ore was ground with 10 pounds of No. 5 burner oil per ton of ore. 2.0 pounds of Na_2CO_3 per ton of ore was added for conditioning the pulp. 10 pounds of oleic acid per ton of ore was added in small increments to collect the manganese mineral.

Four charges of ore were floated, and the rougher concentrates combined for cleaning. 0.5 pound Na_2SiO_3 was added for conditioning in the cleaner stage. Detailed data of this test were:

Product	Weight, percent	Mn, percent	Distribution of Mn, percent
Cleaner concentrates	34.6	37.7	69.1
Cleaner tailings	30.2	11.9	19.0
Rougher tailings	35.2	6.4	11.9
Composite	100.0	18.9	100.0

From this preliminary test data, it appears that the possibility of obtaining reasonably high-grade concentrates from this ore is limited by considerable sacrifice of recovery. Selective mining of the less silicious portions of the ore for concentration might give as good returns as attempting to concentrate the whole ore.



LOCATION
LAST CHANCE MINE-MANGANESE
LANDER COUNTY, NEVADA
DOCKET- D M E A No. 3478
SCALE: 1" = 25 MILES

FIGURE 1

DOCKET
Surname:

Rutledge
Martin
DeHuff
Selfridge
K. Johnson

400

OCT 21 1954

Mr. H. C. Miller, Executive Officer
DMEA Field Team, Region III
420 Custom House
555 Battery Street
San Francisco 11, California

Re: Docket No. DMEA 3478-Manganese
Petersen, Lowe, Bush & Campbell
Last Chance mine
Lander County, Nevada

Dear Mr. Miller:

The above-docketed application for exploration assistance is being referred to your office for a field examination of the property.

Enclosed are two copies of letter dated October 8, 1954, from the applicant, with attachments. Though the information submitted with the application was insufficient to warrant a field examination, it is now believed that little additional data will be obtained from the applicant. A field examination will be required, therefore, to determine if the deposit warrants exploration assistance by the Government.

Two copies of a relevant memorandum dated September 13, 1954, by E. L. Newcomb, Geological Survey, are enclosed for your information.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (216)

Enclosures

APPROVED:

J. H. Hedges

Member, Bureau of Mines (213)

Thor H. Kiilsgaard

Member, Geological Survey (216)

cc: DOCKET
CODE 400
ADM. READ. FILE
OPER. COMMITTEE
FIELD TEAM, REG. III
G. DeHUFF, USBM
THOR KIILSGAARD, USGS

FARutledge/ls
11-15-54

RCS.

400

DOCKET
Surname:
Rutledge
Kerlin
DeHuff
Kiilsgaard
Hedges
Selbridge
Johnson

OCT 21 1954

Mr. William V. Bush
Petersen, Lowe, Bush & Campbell
Last Chance Mine
Austin, Nevada

Re: Docket No. DMEA 3478 - Manganese
Last Chance Mine
Lander County, Nevada

Dear Mr. Bush:

The above-docketed application for exploration assistance for manganese has been reviewed by the Iron and Ferro-Alloys Division of the Defense Minerals Exploration Administration and referred to Mr. H. C. Miller, Executive Officer, DMEA Field Team, Region III, 420 Custom House, 555 Battery Street, San Francisco 11, California, for a field examination of the property.

Any assistance that you can render the members of the Field Team will be appreciated.

Sincerely yours,

C. O. Mittendorf

Administrator

CC: DOCKET
CODE 400
FIELD TEAM, REGION III
OPER. COMM.
ADMIN. READ. FILE
G. DeHUFF, USBM
THOR KIILSGAARD, USGS

FARutledge/ls
10-14-54

R.C.J.

WILLIAM L. PETERSEN, LOWE, BUSH
AND CAMPBELL
AUSTIN, NEVADA

Defense Minerals Administration
RECEIVED
OCT 12 1954

October 8th, 1954

RE: Docket No. DMEA 3478 - Manganese
Last Chance Mine,
Lander County, Nevada

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

WSM

Dear Mr. Martin:

Thank you for your letter of September 17th. Following your request, in the order made, we are pleased to provide the following information:

1. Sketch map showing location of body from which 55.3 LDT was shipped to Wenden depot. Area marked with red X's - this was a representative shipment from this property.
2. Please refer to copy (typed) of Settlement Sheet attached hereto.
3. Estimated length of deposit, 250 feet. Estimated width, 100 feet.
4. Ownership of operating equipment listed. The equipment listed will either be rented from an Equipment Rental Company or will be acquired by the applicants.

Under separate cover, the six executed copies of the Owner's Consent to Lien will be sent to you in a day or so.

Trusting that the receipt of this information will now make it possible for you to proceed with our appliaction, believe us,

Yours very truly,

PETERSEN, LOWE, BUSH & CAMPBELL

Per Wm. V. Bush

DMEA 3478

COPY

Colorado School of Mines Library
RECEIVED
OCT 12 1954

GENERAL SERVICES ADMINISTRATION
Materials Purchase Depot,
Wenden, Arizona

Date October 4, 1954

2446
Acceptance Number
Last Chance #1
9-478-1
Certificate of Authorization No.

2842
Receipt & Weight Ticket No.

TO

William V. Bush
12112 Sheridan Lane
Gardon Grove, Calif.

Subject to ther terms and conditions of the Manganese Regulation, as amended establishing the Government's Purchase Program for Domestic Manganese Ore at Wenden, Arizona, the Government accepts 126400 pounds (wet basis) of manganese ore, delivered by you at the Purchase Depot, Wenden, Arizona, and covered by Recepot No. see above . Such ore has a moisture content of 2.0 % and analyzes on a dry basis as follows:

Manganese (MN) Content		Percent 29.2
WEIGHTS	POUNDS	
Wet Basis	126400	
Less Moisture 2.0 %	2528	
Net Dry Basis	123872	L.D.T. 55.30

EVALUATION AND SETTLEMENT DATE

Gross Payment	$37.88	X 55.30	L.D.T.	2094.76
Deduction For Nodulizing	$	X	L.D.T.	
			NET PAYMENT	2094.76

BUREAU OF MINES — Glen M. Hanson RR (Signature) — Metallurgist (Title)

Name Glen M. Hanson Bureau of Mines Representative

GENERAL SERVICES ADMINISTRATION — A. Earl Johnson RR (Signature) — Manager (Title)

Name A. Earl Johnson Materials Purchase Dept.

TO: General Services Administration, Region 9,
49 Fourth Street, San Francisco, 3, Calif.

FOR: Manganese Ore delivered as indicated above $ 2094.76

I Certify that the above bill is correct and just and that paymenttherefor has not been received. The Producer warrants that said ore was mined in the United States, its Territories or Possessions.

PRODUCER William V. Bush DATE October 6, 1954

DMEA 3478

COPY

Bureau Mines Admin.
RECEIVED
OCT 12 1954

GENERAL SERVICES ADMINISTRATION

EMERGENCY PROCUREMENT SERVICE Region 9
49 Fourth Street
San Francisco 3, Calif.

In Reply Refer To: 9-EP

October 6, 1954

Mr. William V. Bush
12112 Sheridan Lane
Garden Grove, Calif.

Certificate No. 9-478

Dear Mr. Bush:

We have received a report from the Bureau of Mines summarizing the results of floation studies of sample of Lot 1, manganese ore which was shipped by you from the Last Chance No. 1 Mine.

The ore proved amenable to concentration by flotation methods and the manganese product met all specifications of the manganese purchasing program.

It is recommended, if you continue to ship the same quality ore from the Last Chance No. 1 Mine, that the results of the testing be used in calculating the payment due for ore assaying between 26.5 percent and 32.0 percent manganese. Higher or lower grade ore than covered by the range tested would require new flotation study as would ore of different physical composition.

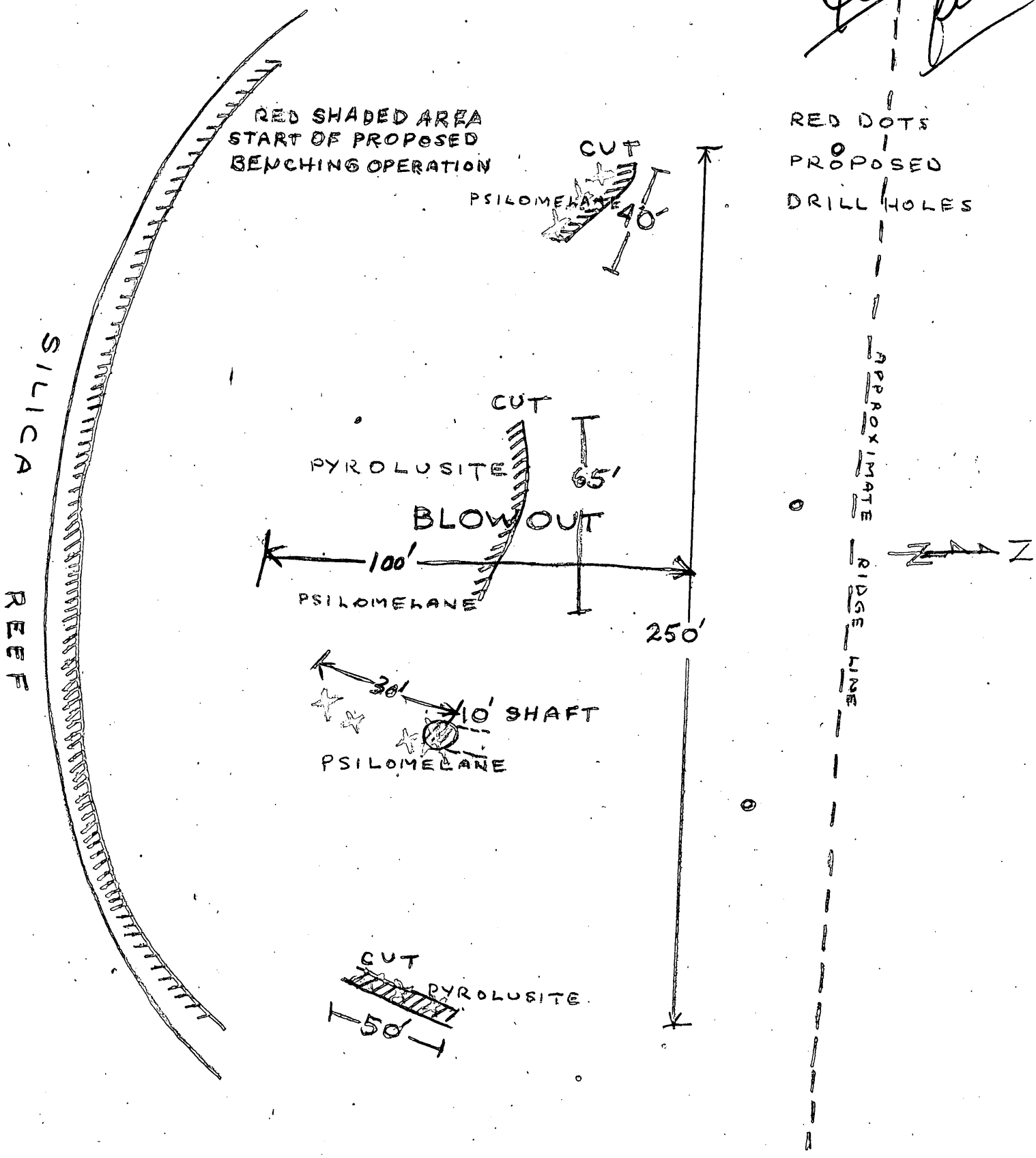
Very truly yours,

(S) R. E. Reno, Jr.

Deputy Regional Director

RE. DMEA -3478

400 file



LAST CHANCE MINE
WILLIAM L. PETERSON ET AL.
AUSTIN, NEVADA

William V. Bush
12112 Sheridan Lane
Garden Grove,
Calif

Sept 20, 1954

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 23 1954

WSM

U.S. Dept of Interior
Defense Minerals Adm.
Washington 25, D.C.

Re: DMEA 3478-Mn

Gentlemen:

Please let me know when to expect an answer on the above referenced loan application. I don't have the least idea how long it takes to process such an application.

Yours very truly

William V. Bush
12112 Sheridan Lane
Garden Grove,
Calif.

On 9/17 we asked Wm L. Patterson, etal, for more data.

No reply necess. Crossed in the mail with ours of 9/17
WSM

400

DOCKET
SURNAME
Rutledge
Martin
Johnson

SEP 17 1954

Messrs. Petersen, Lowe,
Bush, and Campbell
Austin, Nevada

Re: Docket No. DMEA 3478 - Manganese
Last Chance mine
Lander County, Nevada

Gentlemen:

The above-referenced application for exploration assistance in exploring for manganese has been reviewed by the Iron and Ferro-Alloys Division, Defense Minerals Exploration Administration.

The information submitted with your application is insufficient to justify a field examination by the Government. To substantiate the occurrence of manganese on your property and permit us to consider your application further, you should provide us with the following data:

1. Assay certificates and sketch map showing location and length of samples.

2. Settlement sheets if any shipments have been made.

3. Estimated width and length of the deposit.

4. Ownership of the Operating Equipment listed under Item 6(d), to be rented.

Six executed copies of the enclosed Owner's Consent to Lien are also required.

We will, therefore, hold your application in abeyance until the requested data have been received.

Sincerely yours,

SIGNED

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

FARutledge:foc
cc to: Docket
Adm. Reading File
Code 400
FT. REG. III
Mr. Kiilsgaard, USGS
Mr. DeHuff, USBM

R.G.G.

IN REPLY REFER TO:

Docket

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

September 13, 1954

WSM

Re: DMEA-3478
Last Chance Mine
Reese River District
Lander Co., Nevada
$72,580.46 - Manganese

Memorandum

To: W. S. Martin
Defense Minerals Exploration Administration

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

Subject: Review of application

Pending further open pit mining & churn drilling

The applicant has not clearly outlined what exploration work he plans to do. Apparently three churn drill holes would be drilled to an average depth of 150 feet, but the remaining proposed work requires clarification and additional supporting data.

Exploration to date has consisted of stripping or trenching and some blasting of outcrops. The applicant states that he has removed 50 tons of shipping ore and 500 tons of mill ore ranging in grade from 27 to 45 percent manganese.

Assay certificates, location of samples, nature of deposit, and the width or thickness of deposits should be requested from the applicant. It is possible that the silica, iron and phosphorous contents are too high for commercial manganese ores. A number of properties in Lander County have proven to be uneconomic because of excessive amounts of these impurities.

Before a field referral can be justified, the applicant will need to supply more information about his project and further pertinent data in support of his application.

E. L. Newcomb
E. L. Newcomb

Approximately 1[illegible]

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

September 10, 1954

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: Chief, Operation's Control and Statistics Division

Subject: Assignment of Docket Number

There is listed below the assigned docket number to an application recently received from Region III.

DMEA - 3478 William L. Petersen, et al.

Robert E. Adams,
Chief, Operation's Control
and Statistics Division

September 10, 1954

Mr. William L. Petersen, et al.
Austin
Nevada

Subject: DMEA-3478
Re: Exploration Assistance
Last Chance Mine

Gentlemen:

The receipt of your application dated August 24, 1954 for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA-3478 and referred to the Iron and Ferro-Alloys Division.

Kindly refer to in any future correspondence relating to your application.

Sincerely yours,