DMEA Form 9
Rev. 6/57

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE — Idm-E NO. 374 — DMEA NO. 2359

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- [ ] Withdrawn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
- [x] Certification of Discovery
- [ ] Closing Letter
- [x] Cost Audits
- [x] Termination Notice or Agreement
- [ ] Recision Notice
- [ ] Assignment of Contract
- [ ] 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)
- [x] Work Completed 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

Folder No. 2 : 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
- [x] Operator's Monthly Reports with transmittal, narrative and maps.

Folders No. There is one: Maps (Use pocket folder or envelope)

Folders No. _____ : Settlement Sheets

Folders No. _____ : Drill Logs

Folders No. _____ : Royalty material

17963

GOVERNMENT COPY

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

To: Old Dominion Manganese Company, Inc.
Room 2100
52 Wall Street
New York 5, New York

Pursuant to the provisions of Exploration Project Contract No. Idm-E374, dated July 29, 1952 (Docket No. DMEA 2359), hereinafter called the "contract", between you and the United States of America, hereinafter called the "Government"; to establish and fix the Government's percentage royalty on production and its lien thereon and on the land described in the contract, the Government considers and therefore certifies that a discovery or development from which production may be made has resulted from the exploration work.

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

Northward from old mine workings at the Mineral Ridge mine, surface trenching and test pitting along or near the crest of the ridge exposed the continuation of manganese mineralization occurring in a deeply weathered chert zone in the Helderberg (New Scotland) formation of Devonian age.

THE UNITED STATES OF AMERICA

Dated: APR 2 8 1954

By: C D Mitchenor
Administrator, Defense Minerals
Exploration Administration

cc: Docket
FT, Reg. 8
Finance Office
Operating Committee
Adm. Reading File
Code 400 - Mr. Martin
Code 800 - Mr. Chambers
Code 110 - Mr. Johnson
J. H. Hedges, USBM
Gilbert DeHuff, USBM
T. P. Thayer, USGS
L. Pavlides, USGS
Irving Gumbel, Act., Dir., Mater. Divn., EPS, GSA.
Robert C. Stephenson, Mgr., Old Domin. Mn. Co., Inc.
2500 Girard Trust Bldg., Philadelphia 2, Pa.

FARutledge/ls 4/26/54

DOCKET COP

Rutledge
Martin
Chambers
DeHuff
Pavlides
Hoffhund
Hedges
Jarbek
H Johnson

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

To: Old Dominion Manganese Company, Inc.
Room 2100
52 Wall Street
New York 5, New York

Pursuant to the provisions of Exploration Project Contract No. Idm-2374, dated July 29, 1952 (Docket No. DMEA 2359), hereinafter called the "contract", between you and the United States of America, hereinafter called the "Government"; to establish and fix the Government's percentage royalty on production and its lien thereon and on the land described in the contract, the Government considers and therefore certifies that a discovery or development from which production may be made has resulted from the exploration work.

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

Northward from old mine workings at the Mineral Ridge mine, surface trenching and test pitting along or near the crest of the ridge exposed the continuation of manganese mineralization occurring in a deeply weathered chert zone in the Helderberg (New Scotland) formation of Devonian age.

THE UNITED STATES OF AMERICA

Dated: APR 2 8 1954

By: C F Mittendorf
Administrator, Defense Minerals
Exploration Administration

cc: Docket
FT, Reg. 8
Finance Office
Operating Committee
Adm. Reading File
Code 400 - Mr. Martin
Code 800 - Mr. Chambers
Code 110 - Mr. Johnson
J. H. Hedges, USBM
Gilbert DeHuff, USBM
T. P. Thayer, USGS
L. Pavlides, USGS
Irving Gumbel, Act. Dir., Mat. Divn., EPS, GSA
Robert C. Stephenson, Mgr., Old Domin. Mn. Co.,Inc.
2500 Girard Trust Bldg., Philadelphia 2, Pa.

DOCKET Copy

FARutledge/ls
4/26/54

DEFENSE MINERALS EXPLORATION ADMINISTRATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF REVIEW

I have reviewed the Monthly Reports of:

Old Dominion Manganese Company, Inc.
Star Tannery, Virginia
and
Room 2100, 52 Wall Street
New York 5, New York

pertaining to Exploration Project Contract No. Idm-1374, Docket No. DMEA-2359, for the months of October, 1952 to July, 1953, inclusive, covering a project for the exploration of manganese on property known as the Mineral Ridge Mine, located in Shenandoah and Frederick Counties, Virginia.

My review included an examination of the Monthly Reports (Forms MF-104) and supporting documents attached thereto, comparison of the costs claimed with the contract and pertinent schedules, consultation with the Executive Officer of the Regional Field Team, verification of the performance of the work by reference to the Field Team's Final Report, 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 reasons:

(a) a major portion ($4,950.00) of the costs were incurred under a contract provision for payment by the Government on the basis of agreed unit costs of units of work actually performed;
(b) the Monthly Reports were supported by substantiating transcripts of the portion of the costs incurred under a contract provision for payment by the Government on a basis of actual costs; and
(c) the administrative cost to the Government of an audit would be excessive in relation to the estimated amount of possible disallowances thereunder.

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

Total cost as billed by Contractor		$6,177.22
Exceptions:		
By DMEA Finance Officer	- 0 -	
Herewith	- 0 -	- 0 -
Total Accepted Cost		$6,177.22

The contract calls for a 75 percent participation of exploration expenses by the United States Government. Therefore, payment to the contractor by the Government in the amount of Four thousand six hundred thirty-two and 92/100 Dollars,

$4,632.92

is considered valid and proper.

October 21, 1953

E. D. Talbert, Auditor

9-28

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 28 1953

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

TERMINATION OF EXPLORATION PROJECT CONTRACT BY AGREEMENT AFTER COMMENCEMENT BUT BEFORE COMPLETION OF THE WORK

It is agreed this 4th day of September, 1953, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Old Dominion Manganese Company, Inc., a corporation duly organized and existing under and by virtue of the laws of the State of Delaware, Room 2100, 52 Wall Street, New York 5, New York, hereinafter called the "Operator," parties to that certain Exploration Project Contract No. Idm-E374, Docket No. DMEA 2359, dated July 29, 1952, that the said contract shall be and is hereby terminated as of the first date above written.

Any work prosecuted or costs incurred by the Operator after the date first above written shall be for the sole account of the Operator, except for the costs of any reports, accounts, and winding-up and settlement actions provided for in the contract.

The undersigned Operator hereby releases and agrees to save harmless the Government from all claims and demands under or arising out of said Exploration Project Contract, except as herein expressly otherwise provided.

Witness the following signatures as of the day and year first above written.

THE UNITED STATES OF AMERICA

By O. Mitchell
Administrator, Defense Minerals
Exploration Administration

OLD DOMINION MANGANESE COMPANY, INC.

By John B. Lewis

MF-200
(June 1951)
(Revised Feb. 1952)

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 11 1952
OCT 10 1952

DOCKET NO. EA 2359

COMMODITY Manganese

Idm-E374 Government's Copy

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

EXPLORATION PROJECT CONTRACT [1]

IT IS AGREED this 29th day of July, 1952, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and [2] Old Dominion Manganese Company, Inc., a corporation duly organized and existing under and by virtue of the laws of the State of Delaware, Room 2100, 52 Wall Street, New York 5, New York.

hereinafter called the "Operator," as follows:

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

ARTICLE 2. *Operator's property rights.*—With respect to that certain land situated in the State of Virginia, County ies of Shenandoah and Frederick, ~~described as follows:~~ [3] including the "Mineral Ridge Mine" as described in Annex I.

the Operator represents and undertakes: [4]

(*a*) That the Operator is the owner, in possession and entitled to possession, and that the property is subject only to the ~~following claims, liens or encumbrances as to each of which the subordination agreement of the holder is attached:~~ lien referred to in the Subordination Agreement, attached hereto and made a part hereof, dated May 29, 1952, and signed by Clyde W. Beckner, Incorporated.

(*b*) ~~That the Operator is a lessee, in possession and entitled to possession, and the Owner's Consent to Lien is attached.~~
The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof.

ARTICLE 3. *Exploration project.*—The Operator, within 90 days from the date of this contract shall commence work on a project of exploration for [5] manganese

in or upon the described land; and shall bring the project to completion within a period of 18 months from the date of this contract. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided.

ARTICLE 4. *Performance of the work.*—(*a*) *Operator's responsibility.* The work shall be performed efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for workmens' compensation and employers' liability insurance, with suitable and adequate equipment, materials, and labor, to bring the project to completion within the time fixed. To the extent specified in Exhibit "A," attached hereto, the work may be performed by independent contractor or contractors; and work not specified in Exhibit "A" for performance by independent contractor may nevertheless be so performed upon amendment of Exhibit "A," as agreed to by the parties, to state the work to be so performed and the estimated unit costs thereof, as provided hereafter.

(*b*) *Independent contracts.*—Any independent contract for the performance of work shall be on a unit-price basis (such as per foot of drilling, per foot of drifting, per hour of bulldozer operations, per cubic yard of material moved), or on some basis that will indicate the amount due for work performed at any stage of the work to be performed under such independent contract. The Government shall not be nor be considered to be a party to any such independent contract, and the Government's right to terminate the exploration project contract under any of its provisions shall not in any manner be affected by reason of any such independent contract. If the reference in Exhibit "A" to any such independent contract states that the Government's approval thereof is required, the Government may refuse to participate in the cost thereof unless and until it has given its written approval of the independent contract.

(*c*) *Government may inspect.*—The Government shall have the right to enter and observe and inspect the work at all reasonable times, and the Operator shall provide the Government with all available means for doing so. The Government may consult with and advise the Operator on all phases of the work.

ARTICLE 5. *Estimated costs of the project.*—A statement of the estimated cost of the project is set forth in Exhibit "A," attached hereto. Except insofar as any item of requirement or the estimated cost thereof set forth in Exhibit "A" is there or elsewhere designated as an "allowable maximum," such items of requirement and of related cost are estimates only, and may be exceeded to the extent that the Government may from time to time approve for the most economic and beneficial performance of the work within the limitation of the total aggregate estimate of costs. The Government's approval of any such excess over the estimate for an item of requirement or related cost will be signified by its approval and payment of any invoice or voucher for payment which expressly calls attention to such excess. Items expressly designated in Exhibit "A" or elsewhere as "allowable maximum," and the total aggregate estimated cost are limitations, and any excess therein will be for the sole account of the Operator in which the Government will not participate.

ARTICLE 6. *Allowable costs of the project.*—(*a*) The costs of the project in which the Government will participate are limited to the following:

(1) *Independent contracts.*—Payments to independent contractors under independent contracts listed in Exhibit "A." The estimated cost of any work to be performed under an independent contract is or shall be included in the estimate of costs in Exhibit "A" in terms of the estimated numbers of units of work to be performed, the estimated amount to be paid per unit, and the estimated total amount to be paid to the independent contractor, and such estimates shall be allowable maximums above which the Government will not contribute. Regardless of the provisions of any such independent contract, the Government will participate in the payments to the independent contractor only on account of work actually performed and that conforms with the provisions of the exploration project contract, and only to the extent that the Government deems the unit prices for the work under the independent contract to be reasonable and necessary. No such independent contract shall have the effect of increasing the estimated total cost of the exploration project contract nor the maximum amount which the Government will pay as provided in the exploration project contract.

(2) *Labor, supervision, consultants.*—Labor, supervision and technical services (including engineering and geological consultants), a schedule of which is included in the estimate of costs set forth in Exhibit "A." The requirements and related estimated costs for supervision and technical services are allowable maximums.

(3) *Operating materials and supplies.*—Necessary materials and supplies including items of equipment costing less than $50.00 each, and power, water, and fuel, a schedule of which is included in the estimate of costs in Exhibit "A."

(4) *Operating equipment.*—Any operating equipment to be rented or purchased, or which is owned and will be furnished by the Operator, with the estimated rental, purchase price, or the allowable depreciation, as the case may be, a schedule of which is included in Exhibit "A." Any items listed as owned and to be furnished by the Operator, and related ~~initial~~ allowable depreciation, are allowable maximums.

(5) *Rehabilitation and repairs.*—Any necessary initial rehabilitation or repairs of existing buildings, installations, fixtures, and movable operating equipment, now owned by the Operator and to be devoted to the purposes of the exploration contract, a schedule of which is included in the estimate of costs set forth in Exhibit "A." These items are allowable maximums.

(6) *New buildings, improvements, installations.*—Any necessary buildings, fixed improvements, or installations to be purchased, installed, or constructed for the purposes of the exploration work, with the estimated cost of each, a schedule of which is included in the estimate of costs in Exhibit "A." All of these items are allowable maximums.

(7) *Miscellaneous.*—Repairs to and maintenance of operating equipment (not including initial rehabilitation or repairs of the Operator's equipment), analytical work, accounting, workmen's compensation and employers' liability insurance and payroll taxes.

(8) *Contingencies.*—Such other necessary, reasonable direct costs of performing the exploration work, within the limit of the total aggregate estimate of costs, whether or not included in any schedule of costs in Exhibit "A," as may be approved by the Government in the course of the work, as indicated by its approval and payment of invoices and vouchers.

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

(*b*) The Government's payment in all cases will be based on actual, necessary costs (including contract unit prices) incurred not in excess of any "allowable maximum," and not in excess of the fixed percentage of the total aggregate estimated cost. Costs will be considered to be incurred only as they are or become due and payable.

(*c*) No items of general overhead, corporate management, interest, taxes (other than payroll and sales taxes) or any other indirect costs, or work performed or costs incurred before the date of this contract, shall be allowed as costs of the project in which the Government will participate.

ARTICLE 7. *Reports, accounts, audits.*—(*a*) *Progress reports.* The Operators shall provide the Government with monthly reports of work performed and costs (including contract unit prices) incurred under the contract, in quintuplicate (five copies), upon forms provided by the Government. These progress reports shall be certified by the Operator, and shall constitute both the Operator's invoice of costs incurred on the project during the period covered by the report and his voucher for repayment by the Government, unless the Government requires the use of a standard voucher form with invoice attached. Progress reports shall include surface and/or underground engineering-geological maps or sketches showing the progress of the exploration, with assay-reports on samples taken concurrently with the advance in mineralized ground.

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

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

(*d*) *Accounts and audits.*—The Operator shall keep suitable records and accounts of operations, which the Government may inspect and audit at any time. The Government may at any time require an audit of the Operator's records and accounts by a certified public accountant, the cost thereof to be treated as a cost of the project. The Operator shall keep and preserve said records and accounts for at least 3 years after the completion of the project or the termination of this contract. Upon the completion of the project or termination of the contract the Operator shall render a final account as provided in Article 12.

ARTICLE 8. *Payments by the Government.*—(*a*) The Government will pay 75 percent of the allowable costs incurred, as they accrue, in an aggregate total amount not in excess of $29,700.00, which is 75 percent of $39,600.00, the agreed, estimated total cost of the project in which the Government will participate; *Provided,* that until the Operator's final report and final accounting have been rendered to the Government, and any final auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract.

(*b*) The Government may make any payment or payments direct to independent contractors and to suppliers, for the account of the Operator, rather than to the Operator.

ARTICLE 9. *Repayment by Operator.*—(*a*) If, at any time, the Government considers that a discovery or a development from which production may be made has resulted from the exploration work, the Government, at any time not later than 6 months after the Operator has rendered the required final report and final account, may so certify in writing to the Operator. The certification shall describe broadly or indicate the nature of the discovery or development. In the event of such certification, any minerals mined or produced from the land described in Article 2 within 10 years from the date of this contract, including any mined or produced before the certification, shall be subject to a percentage royalty which the Operator or his successor in interest shall pay to the Government, upon the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production, in whatever form disposed of, including ore, concentrates, or metal, until the total amount contributed by the Government, without interest, is fully repaid, or said 10 years have elapsed, whichever occurs first, as follows:

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

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

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

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

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

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

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

ARTICLE 11. *Title to and disposition of property.*—All facilities, buildings, fixtures, equipment, or other items costing more than $50.00 each, paid for or purchased with funds contributed jointly by the Operator and the Government, although title may be taken in the name of the Operator, shall belong to the Operator and the Government jointly, in proportion to their respective contributions, and upon the completion of the work or the termination of the contract shall be disposed of promptly by the Operator for the joint account of the Government and the Operator, either by return to the vendor, by sale to others, or purchase by the Operator at a price at least as high as could otherwise be obtained, as may appear to be for the best interest of the Government, unless the Government, in writing, waives its interest in any such item. If necessary to accomplish such disposition, the Operator shall dismantle, sever from the land, and remove any such item, the cost thereof to be for the joint account of the parties in proportion to their respective interests. If the Operator, within 90 days after the receipt of written notice from the Government, fails, neglects, or refuses to dispose of such property, the Government may itself enter upon the land, take possession of, and remove and dispose of any such property as above provided.

ARTICLE 12. *Termination and completion.*—The Government may, at any time, by written notice to the Operator, terminate this contract: (*a*) If the Operator fails to provide his share of the money necessary to prosecute operations pursuant to the terms of the contract; (*b*) if the Operator, in the opinion of the Government, fails to prosecute operations pursuant to the terms of the contract; or (*c*) if in the opinion of the Government, operations up to the time of the notice have not indicated the probability of making any worth while discovery and in the opinion of the Government further operations are not justified. Upon the completion of the project or any termination of the contract the Operator shall dispose of any remaining materials, supplies, facilities, buildings, fixtures, and equipment in which the Government has an interest, for the joint account of the Operator and the Government in the proportion of their respective interests; shall render to the Government a full and final accounting of his operations under the contract and his expenditures of money; and shall pay to the Government its pro rata share of any money remaining.

ARTICLE 13. *Changes and added provisions.* The Operator's obligation to bring the project to completion continues only as long as the accumulated allowable costs of the project in which the Government will participate do not exceed the agreed total estimated cost of the project set forth in Article 8.

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C. O. Mitterdorf
Acting Administrator
Defense Minerals Exploration
Administration

OLD DOMINION MANGANESE COMPANY, INC.
(Operator)

By John B. Lewis President

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

Craigh Leonard

[CORPORATE SEAL]

U. S. GOVERNMENT PRINTING OFFICE 16—66328-1

ANNEX I

Tract No. 1

Situated partly in Frederick and partly in Shenandoah County, and BEGINNING at (1) a gum tree, well marked, at a corner of the property now or formerly of Clarence Orndorff, and running N. 44° 19' E. 1242.4 feet to (2) a stake or monument, a young maple; thence, N. 80° 02' W. 1290.02 feet to (3) a stake or monument near a rock pile and old stump; thence, S. 42° W. 1221 feet to (4) a stake or monument; thence, N. 48° W. 1650 feet to (5) a stake or monument; thence S. 25° W. 3217.5 feet to (6) a stake or monument on west side of old road; thence, S. 3° 30' E. 1655.4 feet to (7) stake or monument on side of a ravine; thence, N. 70° E. 346.5 feet, crossing a spring branch to (8) a stake or monument near a sugar tree (said tree bearing corner marks); thence, N. 61° E. 660 feet to (9) a stake or monument on a steep hill side; thence, N. 35° E. 2871 feet to (10) a stake or monument on level ground; thence, N. 82° 08' E. 1359 feet to (11) a stake or monument near an oak stump; thence, N. 35° 52' W. 345 feet to (1) the point of BEGINNING, containing two hundred (200) acres, more or less.

Tract No. 2

Situated wholly in Frederick County and BEGINNING at (1) a stake in line 3-4 of the 200 acre tract above described, being a corner of the property of Moses Orndorff, running approximately parallel to and near the right bank of Paddy Run, by the following sixteen courses and distances: N. 61° W. 303 feet to (2); thence, N. 53° W. 250.01 feet to (3); thence, N. 24° 25' W. 44.8 feet to (4); thence, N. 27° 55' W. 238.3 feet to (5); thence, N. 48° 25' W. 141.7 feet to (6); thence, N. 44° 25' W. 230.5 feet to (7); thence, N. 86° W. 193.1 feet to (8); thence, N. 50° 23' W. 693.8 feet to (9); thence, S. 64° 37' W. 128.9 feet to (10); thence, N. 71° 08' W. 866.8 feet to (11); thence, N. 89° 09' W. 167.4 feet to (12); thence, S. 36° 30' W. 186.7 feet to (13); thence, N. 71° W. 181.2 feet to (14); thence, N. 78° 42' W. 162.8 feet to (15); thence, N. 85° 23' W. 129.9 feet to (16); thence, leaving Paddy Run, running S. 48° E. 1890 feet to (5) of the two hundred acre tract; continuing 1650 feet with line 4-5 reversed of the 200 acre tract; in all 3540 feet to (4) of said two hundred acre tract; thence, N. 42° E. 1080 feet reversing line 3-4 of the two hundred acre tract to (1), the point of BEGINNING, containing 60 acres, more or less.

Tract No. 3

Situated wholly in Shenandoah County, and BEGINNING at an iron bar driven in the ground on the west side of road, in the line between Manganese Company and W. L. Spitler; thence, N. 49° W. 184 feet to an iron pipe, in old fence row corner of Manganese Company; thence, N. 36° E. 150 feet to a large stake, in Manganese Company line; thence, through the Spitler land S. 44½° E. 221 feet to a stake south edge of Yard post; thence, S. 51° W. 134 feet to the point of BEGINNING, containing 0.66 acres, more or less.

The aforesaid three tracts of real estate are the identical tracts of real estate which were conveyed by deed from Robert D. Bauserman and Eleanor E. Bauserman, his wife, to Ernest L. Bailey and Clyde W. Beckner, Incorporated, dated the 24th day of April,1950, and recorded in the Clerk's Office of Shenandoah County, Virginia, in Deed Book No. 162, page 193; and by deed from American Alloy Corporation to Ernest L. Bailey and Clyde W. Beckner, Incorporated, dated the 17th day of April, 1950, and recorded in the Clerk's Office of Shenandoah County, Virginia, Deed Book No. 162, page 190; and by deed from Newton W. Borden and E. E. Morrow, Trustees, to Ernest L. Bailey and Clyde W. Beckner, Incorporated, dated the 1st day of May, 1950, and recorded in the Clerk's Office of Shenandoah County, Virginia, in Deed Book No. 162, page 188; and by deed from Louis L. Ward to Ernest L. Bailey and Clyde W. Beckner, Incorporated, dated the 1st day of May, 1950, and recorded in the Clerk's Office of Shenandoah County, Virginia, in Deed Book No. 162, page 187; each of said deeds having also been recorded in the Clerk's Office of Frederick County, Virginia, on the 11th day of May, 1950; to which deeds reference is made for a more particular description of said real estate.

* * * * * *

The subject contract shall not apply to the block of ground bounded by a vertical plane through the end of the north drift from the Number 6 Tunnel and a vertical plane through the end of the south drift from the Number 6 Tunnel, said planes to be at right angles to the strike of the ore zone. The approximate position of these boundary planes is shown by X-X and Y-Y on "Map of Mine of Hy-Grade Manganese Co. Inc., No. 7", attached hereto and made a part hereof, but the exact position shall be located by a survey after the Number 6 Tunnel is reopened.

EXPLORATION PROJECT CONTRACT
OLD DOMINION MANGANESE COMPANY, INC.
DOCKET NO. DMEA-2359

EXHIBIT "A"

Description of the Work

Stage I

Time Schedule: 0 - 3 months.

1. Excavate a maximum of 30 bulldozer trenches across the outcrop of the residual ore zone at 100-foot intervals on the strike. The first bulldozer trench to be 100 feet northeast of the present main open pit on the outcrop. Additional bulldozer trenches to be spaced at 100-foot intervals to the northeast along the strike of the ore zone until either the limits of the ore zone are reached or the maximum of 30 bulldozer trenches are excavated, whichever is the lesser, as determined by the Operator, subject to approval by the Field Team.

If the limit of the northeastern extension of the ore zone is reached before the contracted 30 bulldozer trenches have been excavated, the remaining bulldozer trenches shall be excavated across the southwestern extension of the ore zone starting at a point 100 feet southwest of the "South Cut" shown on "Map of Mine of Hy-Grade Manganese Co. Inc., No. 7", attached hereto and made a part hereof. Bulldozer trenches shall be spaced at 100-foot intervals.

Each bulldozer trench to be excavated until the ore showings are well exposed or until the attainment of additional depth is not operationally feasible because of terrain conditions.

2. Sink a maximum of 30 test pits in the above bulldozer trenches. Sinking of the test pits and their location is subject to approval of the Field Team. On the completion of 10 bulldozer trenches, a member of the Field Team will examine the bulldozer trenches and check to see that their sampling has been done in a manner satisfactory to the Government. If in the Field Team's judgment, valuable information can be obtained by the sinking of a test pit below the floor of the bulldozer trench, the Field Team and the Operator will together locate one pit in each bulldozer trench so selected. Each test pit shall be a minimum of 2.5 x 7 feet in plan by 10 feet in depth with the 7-foot length across the strike of the ore body.

Stage II

Time Schedule: 4 - 12 months.

1. Extend the No. 6 Tunnel level at either one or both ends an aggregate distance not to exceed 1,000 feet. Size of the drift shall

be approximately 5' x 7' in the clear. The work of Stage II is to be undertaken only after the completion of the bulldozer trenches and/or test pits on the northeastern extension of the ore zone under Stage I, and with the prior approval of the Field Team.

The cleaning out of the portal of the No. 6 crosscut and the necessary rehabilitation of the No. 6 crosscut and drifts on the No. 6 level will be at the Operator's expense and not allowable under this contract since they lie within the block of ground exempt from the subject contract, as indicated in Annex I.

Estimated Costs of the Project
(*Indicates allowable maximum)

AGREED UNIT COSTS

Stage I

30 bulldozer trenches @ $175.00 per bulldozer trench	$5,250.00	
30 test pits @ $50.00 per test pit	1,500.00	$6,750.00*

Stage II

1000 feet of drifting @ $25.00 per foot	$25,000.00*

The Government will contribute to the cost of bulldozer trenches, test pits, and drifting on the basis of the above agreed unit costs per bulldozer trench, test pit, or foot, in lieu of actual costs, as they accrue for units of work actually performed. These agreed unit costs cover all costs of the work except those estimated below to which the Government will contribute on the basis of actual costs.

ESTIMATED ACTUAL COSTS

(1) Independent Contracts

Stages I and II

None

(2) Labor, Supervision, Consultants

Stage I[1]		
1 Engineer-supervisor[2] @ $400.00* per month, 3 months	$1,200.00	
1 Assayer (part time) @ $100.00* per month, 3 months	300.00	
1 Consultant[3] @ $400.00* for first 3-month period	400.00*	$1,900.00*
Stage II[4]		
1 Engineer-supervisor[2] @ $400.00* per month, 9 months	$3,600.00	
1 Assayer (part time) @ $100.00* per month, 9 months	900.00	
1 Consultant[3] @ $600.00* for second 9-month period	600.00*	$5,100.00*

1/ The payment for services under Stage I is for the first 3 months of the contract and shall cover work actually performed on both Stages I and II if carried on concurrently during this period.

2/ The engineer-supervisor shall direct the operation and shall be responsible for securing representative samples of the deposit, where warranted, and their subsequent handling. He also shall supervise the preparation and keeping up to date the mine and geologic maps ordinarily necessary for an exploration operation.

3/ The consultant is to be paid only for work performed during the life of the contract.

4/ Payment for services under Stage II is for the second 9-month period of the contract and shall not be construed as increasing the amount of payment for personnel when the work of Stage II is carried on concurrently with that of Stage I as possible during the first 3-month period.

(3) Operating Materials and Supplies

Stage I

Sampling equipment and assay supplies	$ 100.00*

Stage II

Sampling equipment and assay supplies	$ 100.00*

(4) Operating Equipment

Stages I and II

None

(5) Rehabilitation and Repairs

Stages I and II

None

(6) New Buildings, Improvements, Installations

Stages I and II

None

(7) Miscellaneous

Stages I and II

None

(8) Contingencies

Stage I	$ 250.00*
Stage II	$ 400.00*

SUMMARY

Estimated Cost, Stage I	$ 9,000.00*
Estimated Cost, Stage II	30,600.00*
Total Estimated Cost of Project	$39,600.00*
Government Participation @ 75%	$29,700.00*

MF-201
(June 1951)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

SUBORDINATION AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

WHEREAS, the undersigned is the holder of a mortgage, claim, lien, or encumbrance identified and described as follows*:

Note in amount of $15,000., dated May 29, 1952, secured by Deed of Trust dated June 9, 1952, recorded in Shenandoah County, Va. Deed Book No. 170, Page 383 and in Frederick County, Va., Deed Book No. 223, Page 588.

upon that certain parcel of ground described in a certain Exploration Project Contract dated July 29, 1952, between OLD DOMINION MANGANESE COMPANY, INC.

and the United States of America;

NOW, THEREFORE, the undersigned does by these presents subordinate all of his right, title, and interest in said mortgage, claim, lien, or encumbrance to the right, title, and interest of the United States of America under the provisions of said Exploration Project Contract, and agrees that the lien and claim of the United States of America under the provisions of said contract shall be prior to the undersigned's rights under the provisions of said mortgage, claim, lien, or encumbrance; and

The undersigned agrees to commit no act nor assert any right, title, or interest under said mortgage, claim, lien, or encumbrance that might contravene or conflict with the prior lien and claim of the United States of America under the provisions of said Exploration Project Contract.

This undertaking and covenant shall be binding upon the heirs, successors, and assigns of the undersigned.

Dated this 29th day of May, 1952

CLYDE W. BECKNER, INCORPORATED

Clyde W. Beckner

President

D. A. Miles

Assistant Secretary

*Include date of the instrument, and if recorded, book, page, and county of record.

U. S. GOVERNMENT PRINTING OFFICE 16—64581-2

9

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 8 1952

C
O
P
Y

OLD DOMINION MANGANESE CO.
Incorporated
Star Tannery, Virginia

Please reply to:
Room 2100, 52 Wall St.
New York 5, N. Y.
Tel: Digby 4-3644

October 6, 1952

Mr. McHenry Mosier, Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration Administration, Region VIII
College Park, Maryland

Dear Mr. Mosier:

I have your letters of September 19th and October 3d with reference to DMEA Contract Idm-E374.

We have experienced unforseen delays in obtaining a dozer and did not want to advise the starting date until the dozer was on the site.

Our Superintendent advised last Friday evening that it had started the previous day and that he had so written Mr. Burmeister at College Park.

Therefore, the starting date would be October 2, 1952 which is within the 90 days suggested in your September 19th letter, and we have inserted "90" (days) in the first line of Article 3 of the contract.

Present indications are that the first ten trenches should be completed by tomorrow night, October 7, 1952. Your Field Team will probably want to be there on the following day, in accordance with paragraph (2) of Stage I in Exhibit A to the contract.

With appreciation for your copperation.

Sincerely yours,

OLD DOMINION MANGANESE CO., INC.

/s/ John B. Lewis

President

JBL:s

10

Form MF-103
(Revised June 1951)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.1.

MF-103 Should Be Filed With General Technical Data Form MF-100

APPLICATION FOR AID FOR AN EXPLORATION PROJECT PURSUANT TO MINERAL ORDER 5, UNDER DEFENSE PRODUCTION ACT OF 1950

Not To Be Filled in by Applicant

Docket No. DMEA-2359
Metal or Mineral
Date Received 2-7-52
Amount $
Participation (Government %)

Name and address of applicant

Old Dominion Manganese Co., Inc.
219 Virginia Street, West
Post Office Box 2388
Charleston, West Virginia

Date January 23, 1952

DEPARTMENT OF THE INTERIOR
FEB 1 1952
Defense Minerals Administration

If you have already filed MF-100, give date filed _____, type of assistance requested Exploration,

DMA Docket Number (if available) _____

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four copies each, of the signed application form, General Technical Data Form MF-100, and answers to questions as specified, to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive office thereof, with your name and address on each sheet of the application and all accompanying papers. If you have previously filed MF-100, it is not necessary to file it again. However, you should indicate in space provided above the type of assistance previously applied for (loans, procurement contracts, etc.) and DMA Docket Number, if available. *When a question is inapplicable it should be so stated in the form.* Additional sheets should be attached in answering any questions or in supplying additional information. IF YOU CANNOT ANSWER A QUESTION, SO STATE.

1. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property.

   (*b*) If you are not the owner of the property, submit a copy of the lease, purchase option, or other agreements under which you are authorized to operate the property with each copy of your application.

   (*c*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted.

   NOTE: (1) If both areas are the same, so state. The only obligation to repay the Government is from the net earnings from any commercial discovery made in the area specified in (*c*) above in which the exploration is to be conducted, and the expenditure of funds which may be charged as costs of the project must be limited to that area or to work necessary to perform the exploration in that area.

   (2) If applicant is not the owner of the property or if there are any liens or encumbrances against the property, copy of agreements of claimants, lienors, encumbrances, and lessors subordinating their interests in the property to the interest of the Government under the Exploration Project Contract will be required for attachment to the Contract.

2. (*a*) What metals or minerals do you expect to find? Manganese

   (*b*) Furnish statement of the geologic features of your property, giving type of ore deposit and reasons for expecting to find commercial ore bodies. Illustrate with maps or sketches. If you have a geologic or engineering report, or assay maps showing width and grade, please send them with application, stating whether or not you wish to have them returned.

16—64067-2

See Rukeyser Report and Accompanying Maps

The information requested in questions 3, 4, 5, 6, 7, 8, and 9 below should be answered specifically and in detail, as this information will be attached to and incorporated as part of the Exploration Project Contract, if such contract is entered into with you by the Government.

ANSWER EACH QUESTION ON SEPARATE SHEETS OF PAPER AND SUBMIT A COPY OF EACH ANSWER FOR EACH COPY OF YOUR APPLICATION.

3. (*a*) Describe fully the proposed work and give the total cost of the project.

   (*b*) State the time required to start the project and to complete it.

4. Submit a map or sketch of the property involved showing a plan (and cross section, if needed) of the present mine workings and the *location of the proposed exploration work* as related to geologic features, such as contacts, veins, ore-bearing beds, etc.

5. Furnish an itemized list of existing facilities, buildings, installations, and fixtures with a statement of the cost of any necessary rehabilitation or repairs to put into useful and operable condition.

6. Furnish a detailed list of additional facilities, buildings, and fixtures to be purchased, installed, or erected by you, with the estimated cost of each item.

7. Furnish a detailed list of operating equipment, separated into items to be—

   (*a*) Rented

   (*b*) Purchased

   (*c*) Furnished by you

   with the rental, purchase price, or depreciation of each item, as the case may be, to be charged as a cost of the project.

8. Furnish an itemized schedule of labor, by numbers and classes (miners, muckers, etc.) and of supervisors by numbers and positions, with the maximum wages or salaries to be paid to each.

9. Furnish a detailed list with estimated cost of each item for materials, supplies, engineering, assaying, accounting, power, water, utilities, and any other items not provided for above.

10. (*a*) How much are you prepared to invest in the proposed project?

    (*b*) Is this amount sufficient to pay your part of the cost of the project, in accordance with the regulations on Government participation (Sec. 9 of MO–5)?

11. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.

CERTIFICATION

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

Old Dominion Manganese Co., Inc.
(Name of company)

By [signature]
(Signature of authorized official)

January 23, 1952.
(Date)

Vice President
(Title)

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—64067-2

DATA TO ACCOMPANY FORM MF-103

1. (a) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property.

The property consists of about 260 acres of land in Shenandoah and Frederick Counties, Virginia, together with a mill building in which a complete beneficiation plant is now being erected; a warehouse and office building; and a workers' residence containing 14 rooms.

(b) If you are not the owner of the property, submit a copy of the lease, purchase option, or other agreements under which you are authorized to operate the property with each copy of your application.

An operating and management agreement between the Corporation and the individual owners of the real estate, mineral rights, and machinery and equipment is now being prepared by the attornies for the companies and will be submitted as soon as possible.

(c) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted.

The legal description of the property is attached hereto.

NOTE: (1) If both areas are the same, so state.

Both areas are the same with the exception of the area uncovered by the present open cut where manganese ore is known to exist. Such ore as can be recovered from this zone would not be discovered as a result of the proposed exploration.

(2) If applicant is not the owner of the property or if there are any liens or encumbrances against the property, copy of agreements of claimants, lienors, encumbrances, and lessors subordinating their interests in the property to the interest of the Government under the Exploration Project Contract will be required for attachment to the Contract.

There are no liens against the property but as the Corporation does not own the property the individual owners thereof will execute subordinating agreements or a lien in the amount of the estimated amount to be made by the Government together with the terms of repayment can be recorded on the County records.

TRACT NO. 1.

Situated partly in Frederick and partly in Shenandoah County, and BEGINNING at (1) a gum tree, well marked, at a corner of the property now or formerly of Clarence Orndorff, and running N. 44° 19' E. 1242.4 feet to (2) a stake or monument, a young maple; thence, N. 80° 02' W. 1290.02 feet to (3) a stake or monument near a rock pile and old stump; thence, S. 42° W. 1221 feet to (4) a stake or monument; thence, N. 48° W. 1650 feet to (5) a stake or monument; thence, S. 25° W. 3217.5 feet to (6) a stake or monument on west side of old road; thence, S. 3° 30' E. 1655.4 feet to (7) stake or monument on side of a ravine; thence, N. 70° E. 346.5 feet, crossing a spring branch to (8) a stake or monument near a sugar tree (said tree bearing corner marks); thence, N. 61 E. 660 feet to (9) a stake or monument on a steep hill side; thence, N. 35 E. 2871 feet to (10) a stake or monument on level ground; thence, N. 82° 08' E. 1359 feet to (11) a stake or monument near an oak stump; thence, N. 35° 52' W. 345 feet to (1) the point of BEGINNING, containing two hundred (200) acres, more or less.

TRACT NO. 2.

Situated wholly in Frederick County and BEGINNING at (1) a stake in line 3-4 of the 200 acre tract above described, being a corner of the of Moses Orndorff, running approximately parallel to and near the right bank of Paddy Run, by the following sixteen courses and distances: N. 61 W. 303 feet to (2); thence, N. 53 W. 250.01 feet to (3); thence, N. 24° 25' W. 44.8 feet to (4); thence, N. 27° 55' W. 238.3 feet to (5); thence, N. 48° 25' W. 141.7 feet to (6); thence, N. 44° 25' W. 230.5 feet to (7); thence, N. 86 W. 193.1 feet to (8); thence, N. 50° 23' W. 693.8 feet to (9); thence, S. 64° 37' W. 128.9 feet to (10); thence, N. 71° 08' W. 866.8 feet to (11); thence, N. 89° 09' W. 167.4 feet to (12); thence, S. 36° 30' W. 186.7 feet to (13); thence, N. 71 W. 181.2 feet to (14); thence, N. 78° 42' W. 162.8 feet to (15); thence, N. 85° 23' W. 129.9 feet to (16); thence, leaving Paddy Run, running S. 48 E. 1890 feet to (5) of the two hundred acre tract; continuing 1650 feet with line 4-5 reversed of the 200 acre tract; in all 3540 feet to (4) of said two hundred acre tract; thence, N. 42 E. 1080 feet reversing line 3-4 of the two hundred acre tract to (1), the point of BEGINNING, containing 60 acres, more or less.

TRACT NO. 3.

Situated wholly in Shenandoah County and BEGINNING at an iron bar driven in the ground on the west side of road, in the line between Manganese Company and W. L. Spitler; thence, N. 49 W. 184 feet to an iron pipe, in old fence row corner of Manganese Company; thence, N. 36 E. 150 feet to a large stake, in Manganese Company line; thence, through the Spitler land, S. 44½ E. 221 feet to a stake south edge of Yard post; thence, S. 51 W. 134 feet to the point of BEGINNING, containing 0.66 acres, more or less.

The aforesaid three tracts of real estate are the identical tracts of real estate which were conveyed by deed from Robert D. Bauserman and Eleanor E. Bauserman, his wife, to Ernest L. Bailey and Clyde W. Beckner, Incorporated, dated the 24th day of April, 1950, and recorded in the Clerk's Office of Shenandoah County, Virginia, in Deed Book N. 162, page 193; and by deed from American Alloy Corporation to Ernest L. Bailey and Clyde W. Beckner, Incorporated, dated the 17th day of April, 1950, and recorded in the Clerk's Office of Shenandoah County, Virginia, Deed Book No. 162, page 190; and by deed from Newton W. Borden and E. E. Morrow, Trustees, to Ernest L. Bailey and Clyde W. Beckner, Incorporated, dated the 1st day of May, 1950, and recorded in the Clerk's Office of Shenandoah County, Virginia, in Deed Book No. 162, page 188; and by deed from Louis L. Ward to Ernest L. Bailey and Clyde W. Beckner, Incorporated, dated the 1st day of May, 1950, and recorded in the Clerk's Office of Shenandoah County, Virginia, in Deed Book No. 162, page 187; each of said deeds having also been recorded in the Clerk's Office of Frederick County, Virginia, on the 11th day of May, 1950; to which deeds reference is made for a more particular description of said real estate.

3 (a) The following describes the proposed work and includes an estimate of the cost of such work. (For further details see Rukeyser report and accompanying maps.)

Surface;

It is recommended that the overburden along the outcrop for a distance of about 300 feet, from station 21 + 00 to station 24 + 00 be removed by bulldozer to explore the existance of ore the presence of which is indicated by the structural features of this area and test pits and prospect holes. If this overburden is removed for a width of about 65 ft. it is believed that about 15,000 tons of ore of a grade of about 10% Mn would be expected. This would be an extension of the present open cut. The estimated cost of this work is $15,000.

Underground:

It is recommended that a new tunnel be driven into the eastern slope of the ridge 40 feet vertically below the No. 6 and 200 feet southwest of the centreline thereof. To reach and cross-cut the ore zone the distance required would be about 250 feet. Drifts would then be run simultaneously to the southwest and northeast on the ore, for a distance corresponding to that of the high grade ore shoots mined from the level above - about 1200 feet. The estimated cost of driving the tunnel and drift is $30,000. This work should develop about 30,000 tons of extractable ore.

Recapitulation:

Proposed work	Ore developed	Cost of work
Surface	15,000 tons	$15,000
Underground	30,000 "	30,000
	45,000 tons	$ 45,000

(b) It is estimated that the above work can be completed in six months, but to allow for all possible contingencies a period of one year should be allowed.

5. The following is an itemized list of existing facilities, buildings, instalations and fixtures. The cost of any necessary repairs will be charged to the proposed exploration work.

1. 14 room residence building.
2. Warehouse, office building and laboratory.
3. Mill building.
4. 3" x 4" Gardner-Denver twin cylinder 5" diam. 6" stroke, water pump driven by 15 H.P. Motor. 3000 ft. of pipe to 10,000 gal. tank. Power line, transformers and remote control switch.
5. 2" Centrifugal Pump direct connected to 5 H.P. motor.
6. Complete crushing, washing, heavy-media, jig and table beneficiation plant.

6. No additional facilities, buildings and fixtures are required.

7. The following is a detailed list of operating equipment with rental, purchase price or depreciation of each item to be charged as a cost of the project:

ITEM	RENTAL	PURCHASE	DEPRECIATION
(a) 1. Bulldozer	$10/hr.	-----	------
2. 1 yd. gasoline or diesel shovel	20/hr.	-----	-----
3. 105 cu.ft. gasoline driven air comp.	2/hr.	-----	-----
(b) Air hose, pipe, rails shovels, picks, brattice cloth etc. as required.		Market	
(c) Miscellaneous Equipment			$100/mo.
1. End Dump Mine Cars			
2. 2 Sullivan L 47 Jackhammers			
3. 1 " U 128 6' Column with 2 arms and 2 drifter hand feed saddles			
4. 1 12" Coppus Blower dir. connected to 2 H.P. Motor			

8. Schedule of labor.

1.	Mine superintendent		$400/mo.
2.	Engineer surveyor		275/mo.
3.	Assayer		275/mo.
4.	Machine men	(4)	$1.25/hr.
5.	Helpers	(4)	1.00/hr.
6.	Timbermen	(4)	1.25/hr.
7.	Muckers	(8)	1.00/hr.
8.	Trammers	(4)	1.00/hr.
9.	Misc. labor	(4)	1.00/hr.

9. Estimated cost of services and supplies.

			Total for project
1.	Engineers report		$1000.00
2.	Consultation (as work progresses) 10 days	$100/day	1000.00
3.	Accounting (proportion charge to project)	100/mo.	600.00
4.	Power " " " "	200/mo.	1200.00
5.	Explosives, drill steel, bits, timber, rail, pipe, fuel & lube. oil (for compressor) etc.		8000.00
6.	Equipment rentals (bulldozer, shovel and air compressor		17000.00
			$28800.00

10. (a) We are prepared to invest 25% of the estimated cost of the project i. e. $11,250.

(b) The above amount is estimated to be sufficient to cover our part of the post of the project.
Income from operations during the exploration work should also be available.

Form MF-100
(May 1951)

U.S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

GENERAL TECHNICAL DATA

FOR USE UNDER THE

DEFENSE PRODUCTION ACT OF 1950

NOT TO BE FILLED IN BY APPLICANT

Docket No. DMEA-2359

Date received 2-1-52

Old Dominion Manganese Co., Inc.
219 Virginia Street, West
Post Office Box 2388
Charleston, West Virginia

Name and address of applicant

Date January 23, 1952

INSTRUCTIONS

This form is to be filed with Defense Minerals Administration, Department of the Interior, Washington 25, D. C. It should be accompanied by appropriate application form when a specific type of Government assistance is requested, in the form of (1) loan, (2) purchase contract, (3) Government guarantee of a private loan, (4) priorities or allocation of mining equipment, and maintenance, repair and operating supplies, and (5) other forms of Government assistance that might arise under the Act. Submit four (4) signed copies of the form and accompanying papers. Name and address should be stamped or typed on each sheet of this form and all accompanying papers. *When a question is inapplicable it should be so stated on the form.* Additional sheets may be attached in answering any questions or in supplying additional information. (IF YOU CANNOT ANSWER A QUESTION, SO STATE.) If a question is answered elsewhere indicate where answered. It is not necessary to answer it again.

GENERAL TECHNICAL DATA

Supply the following information on separate sheets, arranged, numbered, and lettered as indicated:

1. Materials produced:
   (*a*) What are the chief mine, mill, or smelter products?
   (*b*) What are the byproducts, if any?
2. Name(s) and type(s) of mine(s), mill(s), smelter(s), refinery(ies), pit(s), quarry (ies), drilling operation(s). Include old names of property, if any. Show extent of workings, including the following:
   (*a*) Linear feet of shafts.
   (*b*) Linear feet of drifts and crosscuts.
   (*c*) Linear feet of tunnels or adits.
   (*d*) Linear feet of other mine openings (explain briefly).

   Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity.
3. For each operation listed above supply the following:
   (*a*) Distance and direction from nearest town and shipping point.
   (*b*) Mining district.
   (*c*) Township, Section, Range.
   (*d*) County, State.
4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated.
   (*b*) Are you operating this property as:
   - ☐ Owner.
   - ☐ Lessee.
   - ☐ Contractor.
5. Number of years in production _____

   If not in production or operation, estimated date when production will begin _____
6. Experience of operators:

   Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who manage the project.
7. History:
   (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for suspension of operation.
   (*b*) State briefly the known history and production of adjoining and neighboring properties.
   (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

8. Names and addresses of Officers, Directors, or Partners, and in addition thereto, the five largest stockholders if applicant is a corporation.

Name and Address (a)	Official Title (If officer is also director indicate by "D") (b)	Total of Annual Salary, Commissions, Bonuses, Etc., Received From Applicant and Affiliates During Last Fiscal Year (c)	Estimated Net Worth Outside of Interest in Applicant (d)	Number of Shares Held in Applicant Corporation: Common (e)	Number of Shares Held in Applicant Corporation: Preferred (f)	Life Insurance Carried for Benefit of Applicant: Amount (g)	Life Insurance Carried for Benefit of Applicant: Net Cash Surrender Value After Loans (h)
Clyde W. Beckner	President	None		250	None	None	None
Paul J. Bertelsen	Vice-President	None		500	None	None	None
Ernest L. Bailey	Secy. - Treas	None		250	None	None	None
	Total	None	x x x x x	1,000	None	x x x x x	x x x x x

If more lines are needed continue on separate sheet.

9. Capital Stock Issues:

For Corporate Applicants

Item	Authorized (a)	Outstanding (b)	Par Value (c)	Number of Shares Outstanding (d)	Dividend Rate Last Paid* (e)
Common stock	$ 1,000.00	$ 1,000.00	$ No Par	1,000	None
Preferred stock	$ None	$ None	$ -	None	None

*Indicate period covered.

10. Production: New Company - No Production

Item	Kind of Product (a)	1948 Total (b)	1949 Total (c)	1950 Total (d)	Present Average Monthly (e)
1. Quantity of product mined or quarried (Short, long, metric tons; barrels; pounds; etc.)					
2. Quantity of product processed (specify unit of measure and type of process)					
3. Quantity and grade of product sold or shipped (specify units of measure)					

11. Do you contemplate a change in the present average monthly rate of production? If so, state estimated maximum monthly production and basis of change. Estimated rate of production to be 1,250 tons of concentrate per Month.

12. Ore or Mineral Reserves: ..... See Rukeyser Report

(a) Describe the ore or mineral deposit briefly. Accompany the application by any available report on the geology and ore reserves.

OLD DOMINION MANGANESE CO., INC.

General Technical Data to Accompany Form MF-100

1. Materials produced:

   (a) Metallurgical grade Manganese
   (b) Waste rock for road and concrete uses (possibly)

2. Name(s) and type(s) of mine(s), mill(s), smelter(s), refinery(ies), pit(s), quarry(ies), drilling operation(s). Include old names of property, if any. Show extent of workings, including the following:

   (a) Linear feet of shafts: See maps accompanying Grasty and Rukeyser Reports.
   (b) Linear feet of drifts and crosscuts: See maps accompanying Grasty and Rukeyser Reports.
   (c) Linear feet of tunnels or adits: See maps accompanying Grasty and Rukeyser Reports.
   (d) Linear feet of other mine openings (explain briefly): See maps accompanying Grasty and Rukeyser Reports.

   Mineral Ridge Mine, open cut and underground mining through tunnels. The mill consists of complete crushing, washing, heavy-media mineral jig, and table concentrating equipment (see flowsheet included in Rukeyser Report).
   Old names of property - Hy-Grade Manganese Company, American Alloys Corporation. (See Rukeyser Report).

   Mine is not flooded. As all entries are by tunnels, mine is self-draining. Mill has capacity for crushing, washing and beneficiating 600 tons per day (24 hours).

3. For each operation listed above supply the following:

   (a) Distance and direction from nearest town and shipping point -
   About 14 miles N.E. to Strasburg
   About 14 miles E. to Woodstock
   About 12½ miles N.E. to Capon Road Station, B&O RR, nearest shipping point

   (b) Mining District - No mining district designation

   (c) Township, Section, Range - See legal description accompanying MF-103

   (d) County, State - Shenandoah and Frederick Counties, Virginia

4. (a) State whether or not property is now in operation, and if in operation, by whom operated -
   Property is not now in operation but is being readied for operation. Mill is now being erected in existing building.

   (b) Are you now operating this property as: Owner - Lessee - Contractor.
   We are operating the property under a management contract for the owners.

5. Number of years in production: See Rukeyser Report - History

(Continued)

6. Experience of operators:

Mr. Clyde W. Beckner, President

President of Clyde W. Beckner, Incorporated, dealers in construction equipment and industrial supplies.

Mr. Paul J. Bertelsen, Vice-President

Graduate of the Massachusetts Institute of Technology; has held executive positions in several companies, including a large bank; has done consulting engineering for a number of industrial, mining and investment companies; has engaged directly in mining for a number of years as president of a mining company, and was responsible for plant design and operation.

Mr. Ernest L. Bailey, Secretary-Treasurer

Registered Professional Civil and Mining Engineer; former Chief, West Virginia Department of Mines; former Commissioner, West Virginia State Road Commission.

Mr. Fred M. Roberts, Director

Graduate of Harvard College and the Harvard Business School; is engaged in the investment banking business; and is a director of a number of companies.

Mr. Trice Carter, Superintendent

Has been associated with Mr. Bertelsen for a number of years in mining; is an expert in Heavy-Media operation and an excellent maintenance man.

7. History - See Rukeyser Report

13. Access Roads:

Good hard-bottom access road to mine from good County road to black-top State road to Capon Road Station, shipping point 12.5 miles from property; 14 miles to Strasburg, Virginia - supply point.

14. Water Supply:

Paddy Run Creek. Ample water supply for all seasons.

15. Power:

Northern Virginia Power Company transmission line crosses property. About 90 KW. See Rukeyser Report for rates.

16. Labor:

New operation; number of men not determined.

(Continued)

17. Equipment and Facilities:

See Rukeyser Report

(*b*) If deposit is other than placer:

(1) Submit assay plans and/or sections showing location and size of proved (measured) and probable (indicated) ore or mineral reserve.

(2) State the tonnage (indicate type of ton) and grade of each class of ore reserve, as above, and show how computed. Tabulated total ore reserve as follows:

TOTAL ORE OR MINERAL RESERVES

Ore or Mineral Reserve	Estimated Tons (a)	Metal or Mineral Content Per Ton (Grade) (b)	Gross Value Per Ton (c)	Recoverable Unit Value Per Ton (d)	Estimated Cost of Production Per Ton (e)
Measured (proved)					
Indicated (probable)					

(*c*) If placer:

(1) Give estimated total yardage and average marketable mineral content of each deposit.

(2) Submit map showing location of placer deposit and surrounding area, with all test holes or pits. Submit logs of each hole and test pit with depth and average value of each.

(3) Describe gravel, stating whether fine, medium or coarse; loose, tight, cemented, or frozen, and whether it contains stumps or boulders more than 1 foot in diameter; if so, how large, and in what proportion.

(4) Describe bedrock, giving type (granite, sandstone, shale, etc.) and state whether it is hard or soft, smooth, uneven or rough.

(5) Describe overburden, stating whether loose, tight, or cemented; fine or coarse textured; furnish estimate of average thickness and total amount.

(6) Tabulate the reserves using the form outlined above for ore or mineral reserves.

13. Access Roads:

Give road distances to shipping, supply and residence points, stating kind and condition of roads.

14. Water Supply:

State source and quantity of water available for operations and whether sufficient for all seasons of year.

15. Power:

State amount of power used, rate per hour, and source thereof.

16. Labor:

State number and classes (miners, muckers, millmen, etc.) of men employed during a recent representative payroll period.

17. Equipment and Facilities:

Describe present equipment on the property, including buildings. (State condition.) List major pieces of equipment now owned or controlled and in serviceable condition available for this operation.

18. Are there any particular conditions or circumstances affecting your operations that are not described above? If so, explain.

CERTIFICATION

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

OLD DOMINION MANGANESE CO., INC.
(Name of company)

By Paul J. Bertelsen
(Signature of authorized official)

January 23rd, 1952
(Date)

Paul J. Bertelsen
Vice-President
(Title)

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—63792-1

WALTER A. RUKEYSER
CONSULTING ENGINEER
60 EAST 42ND ST.
NEW YORK CITY 17
MU.7-7431

REPORT ON THE PROPERTY OF VIRGINIA MANGANESE COMPANY, INC.

(Formerly Owned by the Hy-Grade Manganese Company, Inc.)

LOCATED ON

MINERAL RIDGE NEAR STRASBURG, VIRGINIA

* * * *

December, 1951

WALTER A. RUKEYSER

INDEX

	Page
LETTER OF TRANSMISSION	
INTRODUCTION AND PURPOSE	1 - 2
LOCATION, EXTENT AND TITLES	3
TRANSPORTATION	3
POWER	4
Labor	4
TOPOGRAPHY	5
HISTORY OF THE PROPERTY	6 - 8
GENERAL GEOLOGY	9
THE OREBODIES	10 - 12
Resume' of Geology	12
DEVELOPMENT	13
SAMPLING	14 - 15
Recent Sampling	15
Sketch Showing Bureau of Mines Sampling, July - 1950	15-a
Present Sampling	15
DIAMOND DRILLING	16
ORE GRADE	17 - 19
Surface Residual Ore	17
Underground Replacement Ore	17
Comments on Ore Grade	17
Surface	17
Underground	18
#6 Tunnel-level	18
#8 Tunnel-Level	18
South Tunnel - level	18
Lineweaver Tunnel-level	19
Special Samples	19
ORE RESERVES	20 - 21
Definitions of Classes of	20
Summary of	20-21
Recapitulation of	21
RECOMMENDED EXPLORATION AND DEVELOPMENT	22 - 24
Surface	22
Underground	23-24
METALLURGICAL RESULTS	25
Proposed Flow-sheet by Mr. Paul Bertelson	Addenda
Results of Heavy Media Separation Tests	"
Metallurgical Balance by Mr. Paul Bertelson	"
Complete Analysis of Ore after Grasty	"
Copy of U.S. Government Purchase Contract	"
Comments	25
LIST OF EXISTING FACILITIES; EQUIPMENT & MACHINERY TO BE INSTALLED	26, 26a-b
POWER REQUIREMENTS	27
Comments	27
ESTIMATED COST OF PLANT INSTALLATION AND WORKING CAPITAL	28

INDEX (Cont'd)

	Page
ESTIMATED OPERATING COSTS	29 - 32
Open Cut - Residual Ores	29-30
Open Cut - Stripping Replacement Ores Down Dip	30
Underground Mining of Replacement Ores	31-32
CUTOFF POINT FOR UNDERGROUND ORE	32
ESTIMATED PROFITS	33
CONCLUSIONS	33

* * * * * *

ADDENDA

(See Above)

MAPS AND DIAGRAMS

Grasty Map with Proposed Exploration and Development Work Added	
Sketch-map Sowing Locations of Bureau of Mines Sampling - 1950	15-a
Schematic Diagram Showing Blocks of Ore Reserves	21-a

WALTER A. RUKEYSER
CONSULTING ENGINEER
60 EAST 42ND ST.
NEW YORK CITY 17
MU.7-7431

December 28, 1951

Mr. Auguste Richard
39 Broadway
New York City, 4

Dear Mr. Richard;

Herewith follows my report on the property of the Virginia Manganese Company, Inc., formerly owned by the Hy-Grade Manganese Company, Inc., located on Mineral Ridge near Strasbourg, Va.

A lengthy and detailed report by J. S. Grasty, Ph.D.,Sc.D. dated May 1927, (apparently the most recent available concerning this property) showed extensive proven reserves and,in addition, large quantities of probable and possible ore. However, during my investigation it became evident that the property had been actively mined until its shutdown apparently due to the depression in 1932. At this time, as you know, large quantities of Russian manganese were coming to this ooumtry; and the price of metallurgical ore was only in the neighborhood of $27. per ton. Hy-Grade took advantage of the higher price prevailing for ceramic grade by having a grinding plant at Strasbourg so that the price for such, namely about $42. per ton, was realized.

In as much as the portals of the adits (or mine entries) are now caved, access for the purpose of checking such proven reserves as may be remaining at the present was not possible at the time of my visit (during the first week of this month). However, I was fortunate in being accompanied to the mine by Mr. C. D. Guthrie, of Strasbourg, who had worked with Hy-Grade until the time of closing down. Mr. Guthrie enjoys a high reputation for reliability. He advised me that, in his opinion, it would not pay to re-open the main or #6 Tunnel level, on which the bulk of Dr. Grasty's samples were taken. Mr. Guthrie believes that most of the better grade of ore has been mined between that level and the surface during the years 1927 - '32.

However, from my own study, although only an unknown quantity of proven ore may now remain, there appears to be a considerable tonnage of probable and conservatively possible ore, both at or near the surface and underground. The cost of development to translate those reserves into the proven class is comparatively small. Likewise, the estimated cost of installing the beneficiation plant with the addition of necessary working-capital is inconsiderable when the potential profit is taken into consideration.

My recapitulation of both surface and underground ores remaining shows from 92,000 - 114,000 tons (depending upon ore-shoot factor used) probable. For possible ore I calculate a minimum of 68,000 tons using an ore-shoot factor of 0.064. This factor resulted from calculations based on Dr. Grasty's sampling. The total reserves are therefore in the order of about 175,000 tons, probable and possible.

The ores of this mine are of two types; outcrop, or residual and replacement. The former will run from 7 to possibly 12% in metallic manganese content, which grade appears to me to be commercial due to the relatively low cost of open-cut mining such ores. On a basis of 600 tons per day I have estimated the total daily operating cost for such residual ores to be $1100. The resulting cost per short-ton of ore is $1.83 and per long-ton of concentrates, $16.67.

The estimated in-place grade for the underground replacement type over an average width of 7.7 feet is 27%. After dilution in mining, the mill-heads should contain something slightly over 20% Mn. My estimated cost including mining, milling, handling of concentrates, general expense, in fact all costs at the property, totals $1800 per day. The cost per short-ton of underground ore is $15.00; and per long-ton of concentrates, $27.30. The calculated cut-off point at which profit vanishes in the case of these underground ores is about 15%.

A conservative estimate for the value of each ton of mill product, after penalties, is $55. per long-ton in railway cars, FOB shipping point. My study of the proposed flowsheet for the plant, the metallurgical balance and the list of equipment so kindly supplied me by Mr. Bertelsen, permits the conclusion that the plant adequately can handle the quantities of ore and produce the grade of concentrates in question (41% met. Mn minimum).

Before State and Federal taxes, depletion, depreciation, interest on and return of capital there seems to be an excellent possibility that this operation should result in some $2,000,000 of operating profit. Were the daily tonnages to be realized, the above stated ore-reserves would produce this profit in a period of slightly over 5 years.

Certain exploration and development has been recommended in the report which follows,- both surface and underground. Were the complete program to be achieved, the cost of the surface open-cut work should not exceed $60,000 for removing overburden over a strike-length of 1200 feet.

Also, were the entire underground program to be fulfilled, 1500 feet of crosscut tunnel and drifting, its cost should be in the neighborhood of $30,000. The minimum amount of surface work which in my mind should be done is $15,000 and for underground work the same, a total of $30,000. Please note in this connection that none of the above costs allow for the purchase by Virginia Manganese of capital equipment for either surface or underground, since Mr. Bertelsen has advised me everything required can be rented. However, such rentals have been taken into consideration in the estimating of above costs.

Finally, my estimate for plant-installation and working-capital (in which $2700 is included for unforseen contingencies) is $25,000. This relatively small amount of capital required to place the mill in

WALTER A. RUKEYSER

operation, coupled with the excellent chance of translating probable and possible ore into the proven class, makes this venture to my mind an attractive mining risk.

The expenditure of such risk-capital is recommended.

Very truly yours,

Walter A. Rukeyser, B.Sc., E.M.

WAR/r
Orig. & 2 cc to Mr. Richard
1 c retained

WALTER A. RUKEYSER
CONSULTING ENGINEER
60 EAST 42ND ST.
NEW YORK CITY 17
MU.7-7431

REPORT ON THE PROPERTY OF VIRGINIA MANGANESE COMPANY, INC.

(Formerly Owned by the Hy-Grade Manganese Company, Inc.)

LOCATED ON

MINERAL RIDGE NEAR STRASBOURG, VIRGINIA.

December, 1951

INTRODUCTION AND PURPOSE:

Mr. Auguste Richard and associates are considering the re-opening of the well-known manganese mine at Mineral Ridge in Frederick and Shenandoah Counties, Virginia. This property has been a substantial producer in the past, operations after World War 1 having been under the ownership of the Hy-Grade Manganese Co., Inc. Considerable development, both on surface and underground, was accomplished by that company. Production continued under what appears to have been good technical direction thru early 1932.

In May, 1927 J.S. Grasty, Ph. D., Sc., D., Geological Engineer of Charlottesville, Va. was engaged to make a detailed report on the property. This 54-page report was accompanied by a series of maps based on detailed engineering surveys made by Wm. Wm. McBond, C.E., and, in the opinion of this writer, these maps represent an accurate picture of the surface and underground workings as they existed at that time.

Grasty's report indicates that careful sampling, particularly of underground main drifts, was done by him; and inasmuch as these workings are inaccessible at the present time his sampling has been accepted for use in this report.

The results of more recent, though desultory, spot sampling and check work initiated during the recent examination of the property by this writer will be discussed under a later suitable heading of this report.

Inasmuch as the Virginia Manganese Co., the present owner of the Mineral Ridge property is planning to re-open the mine immediately and are even now moving a beneficiation plant to the site, it became one of the primary purposes of this examination and

report to investigate, if possible, the present status of the ore reserves; to pass on efficacy of proposed flowsheet and the adequacy of the milling equipment; to examine the cost estimates for plant installation and putting the property into production; to recommend such further development as may be considered warranted or necessary; to try to arrive at a reasonable estimate of manganese content of such ores as may remain and to reach some sort of a conclusion as to profit expectancy.

However, subsequent to May 1927, the date of Grasty's report, the property entered into its most intensive period of exploitation; and, until operations are reported to have ceased in 1932 (apparently due to economic conditions existing at the bottom of the depression), considerable though unknown quantities of apparently the highest grade ore were extracted both from underground and surface workings. Furthermore, since the mouths of the entry adits (tunnels cross-cutting the geologic structure) have caved, access to the old workings is not possible at the present time. To complicate further the possibility of accurately determining the quantities of ore which may or may not remain in what was the best developed section of the mine, there are apparently no records available for the purpose of this report which might show the quantities and grades produced by the mine subsequent to the date of Grasty's report.

However, the writer was fortunate during his visit to the property on December 5th and 6th,(1951) to have been accompanied by Mr. C.D. Guthrie, now Water Commissioner of Strasbourg, Virginia who for many years, up to the closing down of the mine in 1932, had an active part in its management. Mr. Guthrie's reputation for reliability coupled with the fact that he is not now an interested party indicate that his oral description of the work which had been done by the Hy-Grade Manganese Company; their mining methods; grades mined; markets; etc. can be taken at face value. Such information was of necessity drawn upon extensively and used in the preparation of this report.

Finally, it became the purpose of this report to determine whether a contract could be profitably fulfilled for manganese ore of metallurgical grade in an amount of 15,000 long dry-tons having an estimated content of 600,000 long-ton units of contained manganese to be delivered to the United States Government f.o.b. railway cars, Strasbourg, Virginia prior to November 30th, 1952. Deliveries begin 4 months after the date of the contract and are to continue at the rate of 1250 tons per month until completion. (Note - the date of execution by the contractor is not shown on the copy of the contract available to the writer, but the assumption is that the date of execution was December 1st, 1951. However, a monthly rate of 1250 tons for the remaining 8 months would not equal the 15,000 called for within the year ending November 30th, 1952). A similar contract for an additional year has been obtained. Hence one of the primary purposes of this report is to advise whether there is a reasonable expectancy that 30,000 long tons of suitable chemical analysis can be produced within the period stipulated and at a sufficient profit to warrant the proposed investment for installing beneficiation plant.

LOCATION, EXTENT AND TITLES:

At the time of Graety's report of May, 1927 the property included 260 acres more-or-less covering Mineral Ridge on Paddy's Run located in both Frederick and Shenandoah Counties in northwest Virginia. The district lies slightly over 100 miles almost due west of Washington, D.C. and some 25 miles south of Winchester, Va. It is located in the north end of the Shenandoah National Park and the entire locality is served by a network of excellent highways.

Mineral Ridge itself is about 14 miles northwest by paved and good gravel state road from Strasbourg, a modern town of some 2,500 population. Woodstock, Va. is located approximately 16 miles south of Paddy's Run.

Since the closing down of the Hy-Grade Company's operations a portion of the property lying at the base of the Ridge and formerly used for mill-tailings disposal has been sold. The actual present acreage now owned by the present company is not available to the writer. However, Mr. Guthrie was emphatic in that the entire ore-important ridge constituting all of the former workings and the apex of the known ore-bodies for a strike-distance of over 3500 feet has been retained in fee simple.

Mr. Guthrie further states that the property formerly used for tailings disposal can be re-purchased at a price of only a few hundred dollars. Inasmuch as this property constitutes a relatively level field at the base of the ridge, - well below the mill-site and past and contemplated workings, this property should be purchased in the event work is recommenced.

It was not within the scope of the present examination to inquire into the matter of legal title so no further comment as to the status of present ownership nor legality of the chain of title will be made herein.

TRANSPORTATION:

Distances from the mine to shipping points have already been commented upon. However, Strasbourg can be reached by two routes, one by gravel and paved roads (via Gravel Springs, Star Tannery and Wheatfield) with an alternate route across Little North Mountain. Both are all-weather routes and will stand continual trucking by heavy-duty vehicles. The latter however has the advantage of containing no bridges which might limit the loads.

Strasbourg is served by two railroads, the Southern and the Baltimore and Ohio. It is planned to utilize the latter and the shipping point will be Capon Road, a tiny hamlet lying somewhat closer to the mine than Strasbourg. This route involves haulage by truck of the mill concentrates a distance of approximately 12½ miles. There is a siding and freight-shed at Capon Road.

POWER:

Ample electrical energy is available and will be supplied by the Northern Virginia Power Company under one of several optional contracts. The writer has examined these contracts and the average cost per kilowatt-hour for the estimated connected load and load-factor is 1.56c. The rates under this form, O.R., provide for the first 30 kilowatt-hours of consumption at 5.8c; the next 300 at 4.5c; the next 350 at 2.5c; and all excess at 1.5c. A 30-minute peak is provided for. The stand-by and other possible additional charges are inconsequential.

The 3-phase line used by the former operators is in excellent condition and exists directly to the presently proposed mill and other existing buildings.

The Power Company's charge for re-connection and installation of transformers is about $1227 partially rebatable after 3 years of energy consumption.

The average rate of slightly in excess of 1.5c per kilowatt-hour, though relatively high to some other southeastern localities, is not considered excessive. And, since the power costs as estimated later in this report form but a comparatively small proportion of total cost per ton of ore treated, the contract as a whole seems quite favourable.

LABOUR:

Mr. Guthrie has informed the writer that there is ample semi-skilled and unskilled man-power available in the district. This immediate section of Virginia is not highly industrialized, the majority of farms are marginal and large-scale lumbering operations are not prevalent. Hence, as in the past, labour can be recruited locally. Many of the residents of the district have at one time or another worked on the Oriskany ores.

To exemplify this Mr. Guthrie has obtained several men for present clean-up operations (and the sampling which the writer instigated during his recent visit to the property) at the minimum rate of 75c an hour. It is believed that at a rate of $1.25 an hour for underground work and $1.00 for surface and unskilled labor adequate man-power can be recruited. Inasmuch as farming in this district at best provides a precarious existence it is felt that with the inducement of the above wage scale the continuance of mine-labour throughout the entire year can be relied upon.

WALTER A. RUKEYSER

TOPOGRAPHY:

The topography of the northern portion of the Appalachian mountains, and in particular of this Blue Ridge section of Virginia, is primarily a result of regional geology. Mineral Ridge with its accompanying parallel ridges and valleys is a typical result of the folding of Palaeozic sedimentary rocks, - sandstones, limestones, shales, etc. - to form long, almost unbroken ridges trending northeasterly - southwesterly. Since the period of mountain-making by folding, erosion has peneplained the tops of the ridges so that they all have quite nearly the same elevation of say, 1500 to 2000 feet above sea-level. Subsequently, erosion has slightly deepened the valleys. The difference in elevation between the valleys and ridge-tops is rarely more than a few hundred to a thousand feet. The valleys usually contain streams and brooks which take care of the run-off from the adjacent ridges. The northeast-southwest ridges are cut frequently by gaps often owing their origin to cross-faulting and these gaps in turn form the major drainage features of the district.

In general the terrain is featured by a series of undulating parallel ridges, neither rugged nor difficult of access. The topography offers a pleasant, rolling country offering little obstacle to mine operation.

The climate if typical of this central section of the United States, for the most part the entire winter is moderate and transport should rarely be delayed more than one or two days even under severest climatic conditions. Rainfall is adequate throughout the year and sufficient to provide an ample water-supply for any milling operation contemplated at Mineral Ridge. There is a stream located 2500 feet downhill from the mill.

HISTORY OF THE PROPERTY:

Mr. Guthrie has stated that the Mineral Ridge Mine produced in a comparatively small way during World War I, the output coming mainly from "gophering" operations on high-grade sections. A great many xxf small pits at the surface and the shallow uppermost tunnels apparently accounted for such production. It is reported the ore was hand-sorted by lessors and tributors. No record of this production is available.

The property appears to have been first operated by the Hy-Grade Manganese Company about 1920. The following table after Grasty shows the ore and/or concentrate shipments from the years 1920 through 1926, with the dollar value thereof.

ORE AND CONCENTRATE SHIPMENTS - HY-GRADE MANGANESE COMPANY, INC. - 1920 - 1926.
(After Grasty)

Year	Net Tons		Value
1920	559.68		$ 12,916.33
1921	119.5		5,147.77
1922	517.19		24,036.74
1923	867.95		38,840.28
1924	1,272.63		56,204.60
1925	1,563.80		65,275.48
1926	1,073.31		49,688.11
Net tons	5,974.06	Total Value:	$ 252,109.31

In his report of May 1927 Grasty states that the property was under direction of experienced engineers who participated in the ownership of the property. An excellent policy of blocking-out and proving tonnage has been followed and this is obvious when the mine maps as of that date are examined.

During the company's tenure a small but adequate office, a 14-room boarding house, a warehouse, and a mill-building had been constructed. All are still standing and seem in excellent condition. A small pilot-plant was also installed and although the date of its inception is not given it would seem from the annual production figures that it commenced operation in 1923 or '24. It is reported to have produced 5 tons of concentrates in 10 hours, with ore-feed at the rate of 2 tons for each ton of product.

The following table shows average analysis of the various products as calculated from the figures given by Grasty on pp 14 and 15 of his report.

Product	Silica	Metallic Manganese	Metallic Iron
Table Ccts.	6.00	49.56	2.88
Jig Ccts.	8.38	43.32	7.25

(Note: Table ccts. average of 4 samples;
Jig cots. average of 8)

Hand-sorted mine ore during that period for the average of 3 samples shows the following:

7.49	52.20	3.52

During this period the average price for the output is given as $42.82 per ton, the bulk of the material first having been ground in a small plant located in Strasbourg and the final product sold to the ceramic industry. The steel companies were paying at that time $27.00 per ton before deduction of freight.

The profit per ton for the years 1924 and 1925, was $4.55. This "profit", however, was before exploration and development.

Subsequent to 1927 a larger beneficiation plant is reputed to have been installed; and operated until the property was shut down in 1932 due to the depression. Hence, though no records are available, the output must have been stepped up considerably from previous years.

In this connection Mr. Guthrie informed the writer that the section of the mine extending along the dip from the #6-Tunnel-level to the surface, and along the strike from Grasty's station #12 + 00 (on his base line) to almost station 17 + 00 had been mined out. This applies particularly to the high-grade ore contained in that block of ground. The method of mining used appears to have been a driving by sub-levels started from raises; in effect a sort of modified top-slicing system wherein sorting to some extent was accomplished in the stopes themselves.

Because no records of this production are available it is impossible with the adits caved to estimate what portion, if any, of the proven ore-reserves existing as of May, 1927 between the #6 Tunnel-level and the surface, remain. But one does have Mr. Guthrie's definite statement that it would not pay to re-open this level. This will be discussed in more detail under the later heading of this report treating with ore-reserves.

During this same period (viz. 1927 - 1932) Hy-Grade Manganese operated on the residual outcrop-ores using open-cut shovel methods. The resulting longitudinal cut along the strike was examined by the writer along with three pits which had been mined prior to 1927 and designated respectively the South, Centre and Nelson (or North) Cuts on Grasty's maps. This open-pit on the outcrop extends over 900 feet in length, from about station 12 + 00 to 21 + 00. Its average width is estimated to be approximately 50 feet (although in many places it is much wider). Its depth is estimated at between 20 and 25 feet.

Here again the amount of residual ore remaining in what Grasty placed under his "proven" reserves is incalculable. However, referring again to Mr. Guthrie he advises that an additional slice in all probability can be taken from the bottom of the cut to an additional depth of 8 to 10 feet. This will also be further discussed under a later heading.

After 1932, the property apparently lay idle until sometime during the 1940's, when the American Alloys Corporation is said to have obtained an R.F.C. loan to continue operations thereon. The story is that $75,000 was spent or rather mis-spent in changing over the mill and effecting a new open-cut which cross-cut the formation from a point about 100 feet north-east from the mouth of tunnel #6. This cut ran up the slope of the mountain in a northwesterly direction for a distance of approximately 400 feet joining the outcrop-cut. It's average depth is estimated in excess of 25 feet; and it's average width, 50 feet. It appears that an attempt was made to start stripping the entire hanging-wall and overlying material from what remained of the "proven" ore-reserves subsequent to the underground operations of Hy-Grade Manganese. No production is reported to have resulted from the operations of American Alloys.

The mine has been idle until acquisition by the present company, Virginia Manganese.

* GENERAL GEOLOGY:

The geology of Mineral Ridge as exposed by surface and underground workings represents a typical cross-section of the series of Oriskany sediments of Devonian age of the Palaeozoic. These are underlain by Heldebergian limestone, Silurian in age.

As exposed in this vicinity the Oriskany is composed on its uppermost (most recently deposited) portion of calcareous sandstone having a thickness of 50 to 60 feet. Conformable to and underlying it is a series of intercalated beds of siliceous limestone and chert, the latter now almost wholly decomposed to clay. The combined thickness is 30-60 feet. These in turn are underlain by mixed beds of bluish-grey limestone, with sandy beds occurring particularly in the upper portion, to a thickness of 60 to 70 feet. The bottom or oldest portion of the Oriskany consists of quartzitic sandstone, in places comprising shale. The thickness is from 40 to 50 feet. Thus the entire Oriskany as here exposed varies from say, 200 to 250 feet. Underlying the Oriskany is the Heldeberg series of (generally) thin-bedded limestone with occasional beds of massive limestone and more rarely including thin beds of sandstone. The Heldeberg has a stratigraphic thickness also of from 200 to 250 feet.

The sequence of rocks in the vicinity of the mine as described by Miser shows the following:

Approximately 60 feet: coarse, granular, fossiliferous sandstone - the locus of some of the Oriskany ore. This formation constitutes what the writer believes to be the hanging-wall of the main orebodies of this locality. This hanging-wall sandstone (which will be particularly referred to under later headings of this report dealing with the sampling of the orebody, ore-reserves, etc.) in itself may often constitute ore. Underneath these beds Miser describes the occurrence of approximately 50 feet of yellow, sandy clay containing a few nodules of chert (derived from impure limestone). This in turn is underlain by approximately 50 feet of inter-mixed sandstone, massive and thin-bedded chert with partings of red and yellow clay. These beds contain the ore-zone which is described by him as being from 15 to 27 feet thick. Underlying the above series there is some 100 feet of thick and thin-bedded, dark-grey, coarse, fossiliferous limestone, in part siliceous.

Inasmuch as no marked disconformity or unconformity was observed by the writer between the sandstone comprising the foot-wall of the Mineral Ridge orebodies and the underlying limestone, it is this writer's belief that the entire series of rocks exposed in the workings and along the crest of Mineral Ridge are all of Oriskany age; and that the ores of this deposit are quite typical of the Oriskany iron and manganese deposits for which the Blue Ridge and Alleghany Mountains are well known.

(*) Note: Heldebergian should read Helderbergian in what follows.

THE OREBODIES:

The commonly accepted theory as to the origin of the Oriskany iron and manganese ores (including Mineral Ridge) envisions the leaching out of the more calcareous portions of the Oriskany sandstones by descending, meteoric waters (rain-water). Such waters practically always contain very dilute hydrochloric acid which, migrating downward through the porous sandstones dissolved and thus removed their limey portions. In the interstersticies thus formed the manganese minerals primarily as the oxide, pyrolusite (containing approximately 63% Mn.) and the hydrated oxide psilomeline (about 62% metallic Mn.) were deposited. These manganese minerals were concentrated, by the downward-percolating, cold-water solutions from overlying beds in which they originally occurred in more minute, disseminated quantities. They were deposited in the openings formed by the leaching out of the lime in the underlying beds probably at the same time or shortly after the leaching occurred.

This type of orebody, which constitutes the main occurrence at the Mineral Ridge Mine, is thus of the replacement type. Theoretically such deposits might extend downward to the present water level, although such extent with depth seems problematical to the present writer. Such question of continuity with further depth along the dip seems to depend primarily and more particularly upon the total quantity of manganese originally available for leaching, concentration and redeposition. Further, post-mineral faulting may very well have dislocated portions of the mineralized zone upward or downward.

On the other hand belief as to the continuity of these orebodies below present mine-workings may be justified because of the occurrence of an outcrop of manganese in the creek some 300 feet vertically below the outcroppings at the top of the ridge. Also, there is an occurrence similarly reported to have been uncovered during the sinking of a water-well, 100 feet or so below the lowest mine working. The only known factor which might discourage the anticipation of at least high grade ore below the present mine workings is the fact that the comparatively small amount of work actually done on the ore to date at the No. 8-Tunnel level, 200 feet vertically below outcrop exposed only ore of marginal grade. The small amount of drifting done at this elevation (though occurring only 83 feet vertically and directly below a high-grade section previously developed on an upper level) is in itself not conclusive inasmuch as the ore in this mine (as in practically all others) occurs in well-defined shoots both vertically and horizontally along the ore-zone.

However, for purposes of later calculation of ore-reserves the writer has felt it expedient to assume only that No. 8-Tunnel level (200 feet vertically below outcrop) constitutes the downward limit of commercial ore along the ridge.

Grasty, in his report in May 1927, seems to stress a possibility that what might constitute the best of the ores may occur in the Heldebergian limestone which underlies the Oriskany. Again, to the present writer, at least, it would appear that such ore-potential would depend upon the amount of metallic manganese originally available in the overlying strata the geologic time of deposition and whether or not such manganese would have been entirely deposited from solution before these limestones were reached. The weight of evidence, at least at Mineral Ridge, seems to point to the fact that the ores are probably concentrated in the zones of calcareous sandstone above the limestone; and evidence toward this conclusion is found in the fact that the foot-wall of the ores is composed of a usually barren siliceous sandstone lying between the ore-zones and the older limestones.

For all practical purposes the dip and strike of the Oriskany sandstones and their included ores here conform with present topographic features. In other words, the strike of the sedimentary beds (and their included orebodies) is also northeast-southwest; and their dip, in general from 30° to 40° to the southeast, almost conforms to the eastern slope of the ridge. This, in turn, has an average gradient of approximately 25°.

Locally the dip of the sediments and orebodies varies extremely due to sharp, minor folds within the major system of folding, a "crinkling" along the limb of the anticline to which the ridge owes its topographic formation. Further variations in dip and strike result from local squeezing, faulting and buckling of the beds.

Such stresses have locally changed the dip to extremes ranging from horizontal to vertical and the resulting structure (along the line of the general dip) shows a series of recurring anticlines and synclines. Such structure precludes the use of an easy, large-scale method of mining these ores. (A reference to Grasty's maps, more particularly his No. 7 showing several geological cross-sections, will serve to emphasize the above points and show the variations in dip and the undulations of the beds along their line of strike.)

On the other hand, and on the credit side of the ledger the crinkling of the beds has resulted locally in orebodies up to 25 feet in width. Also, as on the crest of Mineral Ridge, where these beds have been folded into two small synclinal "humps" and anticlinal "valleys", there has been a duplication of the ore-zone along more or less the whole distance of the outcrop. This has permitted the exploitation of the orebody along the top of the ridge by open-cut methods.

As to the width of the orebodies, although the more than one hundred measurements reported by Grasty in his sampling show a remarkably consistent width with an average of approximately 7½ feet, the width varies from 2 to a stratographic thickness of 25 feet.

At the outcrop the duplication of the ore-horizon has permitted open-cut mining to an average width of approximately 50 feet. Finally, the minor folding or sharp buckling superimposed on the general southeast dip of the Oriskany has by reason of such stress facilitated the migration of the solutions to which the ore-bodies owe their origin. They thus provided "stoppages" which would tend to dam such migration permitting the deposition of the manganese mineral from solution. The richer pockets of ore are in all probability due to these structural features.

Resume of Geology

In brief then, the ores of Mineral Ridge are those typical of the so-called Oriskany, - occurring in a series of interbedded sandstones (calcareous and siliceous), shales, cherts, clays and limestones all of which have been thrown up into a large, anticlinal fold. The long axis of this fold strikes northeast-southwest, and the southeast flank is flatter than the opposing northwest limb. On the limbs of this anticline the beds, during folding, were crinkled and buckled, squeezed and faulted to produce the crenelated series of small local folds. At the crest of the major anticline, a monoclinal fold duplicates the ore-horizon. The apex of the anticline corresponds with the crest of Mineral Ridge.

Downward percolating surface waters dissolved the more highly calcareous portions of the sandstones, turned the limestones to clay and chert and leached original disseminated manganese from above, redepositing the metal in the openings from which the calcium carbonates had been removed. The minor buckles and crinkles afforded a structure favorable to such redeposition. The steep west-flank has been so eroded at Mineral Ridge that any ore-horizons have been so eroded that any production from that side of the hill was primarily from "float".

The extent of the replacement varies in degree from complete, forming rich, concentrated ore, to partial some of which may be almost if not entirely devoid of the metal. This gives rise to the presence of the ore in the form of "shoots", in this case rather tabular in shape. As a general rule, with the more productive mines of the Oriskany, it is stated that from one-half to two-thirds of the replaced zone constitutes ore-shoots.

The writer's calculations from Grasty's samples taken every ten feet along the 1200 feet of the #6-Tunnel-drift shows a total of 770 feet of commercial ore located in four shoots of 60, 90, 120 and 500 feet respectively. The relation of ore to total drift length is thus apparently 0.64, (approximately the two-thirds given as an example of the best of the Oriskany mines).

Finally, so-called "residual-ore" occurs at the outcrop along the ridge. This type results from the weathering of the replacement-ores along their outcrop. It comprises nodules, plates, and dust derived from the manganese minerals, enclosed in the top-soil and clayey dirt of the surface. It also consists of small lumps of sandstone which have been broken down during the weathering but not entirely disintegrated, and which may or may not contain manganese. These residual ores offer a quick, easy and cheap source of mill-feed where still remaining; and, though low in grade (usually) as compared to "hard ore", they are easily washed and concentrated.

DEVELOPMENT:

Prior to the time of Grasty's report operations at Mineral Ridge apparently consisted primarily of development and testing by pilot-mill. During that period a policy of systematic opening of the mine underground was pursued. Subsequent work, i.e. from 1927 - 1932 consisted in mining known ore-reserves.

Also since Grasty's maps (which are included with this report, and which see), a long itudinal open-cut for the purpose of mining the residual outcrop-ores along the crest of the ridge was driven and a slight amount of additional work on the drift of the #8 tunnel-level accomplished. Finally, the stoping of the orebody between station 18 + 00 and 16 + 00 (approx.) and from the No. 6 tunnel-level to the surface complete the list of further development done by that company.

Since 1932 American Alloys Corporation (sometime during the 1940's) drove the large, open cross-cut (described previously) apparently as an attempt to strip such ore as remained in that section of the mine.

In view of these later developments very little remains of the many small cuts, test-pits, shafts and other surface exploration previously put down on the outcrop and which are shown in detail on Grasty's map of the surface workings, No. 4. Nor are there any records as to the results of the drill-holes also shown on the same plan, but, to which no reference appears in his report.

Likewise, the major development features shown on his plans No. 7 and No. 6 along the #6 Tunnel-drift extending from "F" southwest to "H" no longer have any significance as to ore-reserves remaining in that section of the mine. Mr. Guthrie has stated to the writer he considers for all practical purposes this section to be worked out. Naturally, under the depression conditions of 1932, Hy-Grade Manganese had no incentive further to develop the orebody.

Therefore the only development work now remaining which may be used toward any more or less accurate appraisal of present ore-reserves consists in (1) the portions of the 1200-foot drift on the ore at the #6 Tunnel-level, southwest of station 11 and northeast of 18 respectively; (2) the small amount of drifting at the #8 Tunnel-level which was accomplished before the shutdown in 1932; and, (3) surface work along the outcrop, particularly in such sections not already mined by open-cut such as 500 - 600 feet southwest of station 11 and some 1200 feet northeast of station 21.

SAMPLING:

Grasty's map No. 7 shows in detail the results of the samples reported by him in 1927, - 110 in number. Inasmuch as the so-called South Tunnel was driven but a few feet below the outcrop, samples which he took there may be considered as surface. Six samples were taken by him from that area, three in the South Tunnel Open-Outs and three in the shallow underground workings of that section. Since these samples were taken the tunnel for the most part has been open-cut and the short distance of it remaining is caved. The only other of his surface samples which are of present significance is one each from the Center and Nelson Cuts, two from Shaft #12, one from Open-Out #14 and one from the Lineweaver Tunnel which is located to the extreme northeast near station 53.

The important #6 Tunnel-level unfortunately is represented by only two samples.

The remaining 100 samples or so all apply to the drift on the #6 Tunnel-level having been taken for the most part at ten foot intervals. Grasty states on p. 10 of his report that these samples "were taken in all cases so as to represent fairly the working face and then turned over to the company's chemist for analysis". He states that his method of sampling consisted "in cutting a trench across the ore-zone as exposed in each case and then measured at right angles to the dip". Also, that during the sampling, "those present and representing Hy-Grade Manganese were the manager, the mine foreman, the chemist, and several assistants." A detailed list of these samples is given in the boxes at the top of his map #7 showing the lab. number, the number of the sample, section from which sample was taken, the station in the drift (distances from the adit) to which the sample number corresponds, the statigraphic thickness represented and the percent of metallic manganese. Descriptive notes are also given in most cases.)

This writer feels that these samples must have been taken in a workmanlike manner and can be relied upon as being representative of the manganese content of the ore where sampled by Grasty.

In addition to the surface and underground samples just referred to, Grasty includes in his report results from the analyses of other special and type-samples. Thus, in addition to his sampling of the various mill-products (cf. this report "HISTORY") he shows on p. 15 of his report nine samples taken "October 11, 12 and 13" (year ?), a sample taken from the "North end-main Entry Mineral Ridge", a "Mine Sample 1/31/27", which represented "a large quantity of handed-cleaned ore without further beneficiation.....a composite sample of three days production"; and finally, a sample representing chemical ore "hand-mined from underground".

Recent Sampling:

In July 1950 the Bureau of Mines' engineers cut six channels, ten to twenty feet long vertically down the southeast wall of the open-cut on the outcrop. They were taken at intervals commencing at a point a few feet southwest of station 16 to station 20. The position of these samples, their length, the metallic manganese and phosphorous content are shown on the accompanying sketch-map along with weighted averages and average length of cut. (Information supplied by courtesy of Bureau of Mines, College Park, Md.)

The only other recent sampling consists of five grabs taken by a Mr. Earnest L. Bailey of Charleston, West Virginia, who, the writer believes, is an interested party. These samples, however, were taken only for metallurgical test-purposes, an inquiry by the Southwestern Engineering Company into heavy-media separation possibilities. South-Western Engineering reports that the five samples received "were identified as No. 1 - Residual Ore from North cut; No. 2 - From south side of North cut opposite sample No. 1; No. 3 - from centre of North cut; No. 4 - from corner of cross-cut of North cut; No. 5 - Ore from the south face of North cut between cross-cuts 1 and 2." (Note: the writer believes that the North cut refers to the Nelson Cut of Grasty's nomenclature).

The five samples weighed respectively 10,728; 11,220; 6,680; 8,090 and 7,234 grams. The total is 43,952 grams or roughly 44 Kg., slightly under 100 lbs. (97 lbs.). Before analyzing, a composite was made after thorough mixing, representing one-half of each sample in the proportion received. Although no information is given as to how the sample was taken nor the widths represented by each of them, they are believed to afford at least some recent information (September 25th. 1950) as to grade of remaining residual outcrop-ore.

Present Sampling:

Inasmuch as the present ownership, in order to get into immediate production, must of necessity commence operations by open-cut mining and since the writer was informed by Mr. Guthrie that he believed an additional ten-foot slice could be taken profitably from the bottom of the present long open-cut, it was believed essential that at least some systematic sampling be done on these residual ores. The writer, therefore, suggested that the four or five men who, at the time of his visit were preparing the mill building for machinery installation, be placed on the sampling of the bottom of the open-cut. This suggestion was immediately adopted and cross-cut trenches, 2 ft. x 2 ft. x 20 ft. long are being cut transversly 10 feet southeast and 10 feet northwest from the center-line of the open-cut at intervals of 100 feet along the strike. The total bulk of the samples is to be shipped to the Bureau of Mines at College Park, Md. for analysis and, it is hoped, mill-testing.

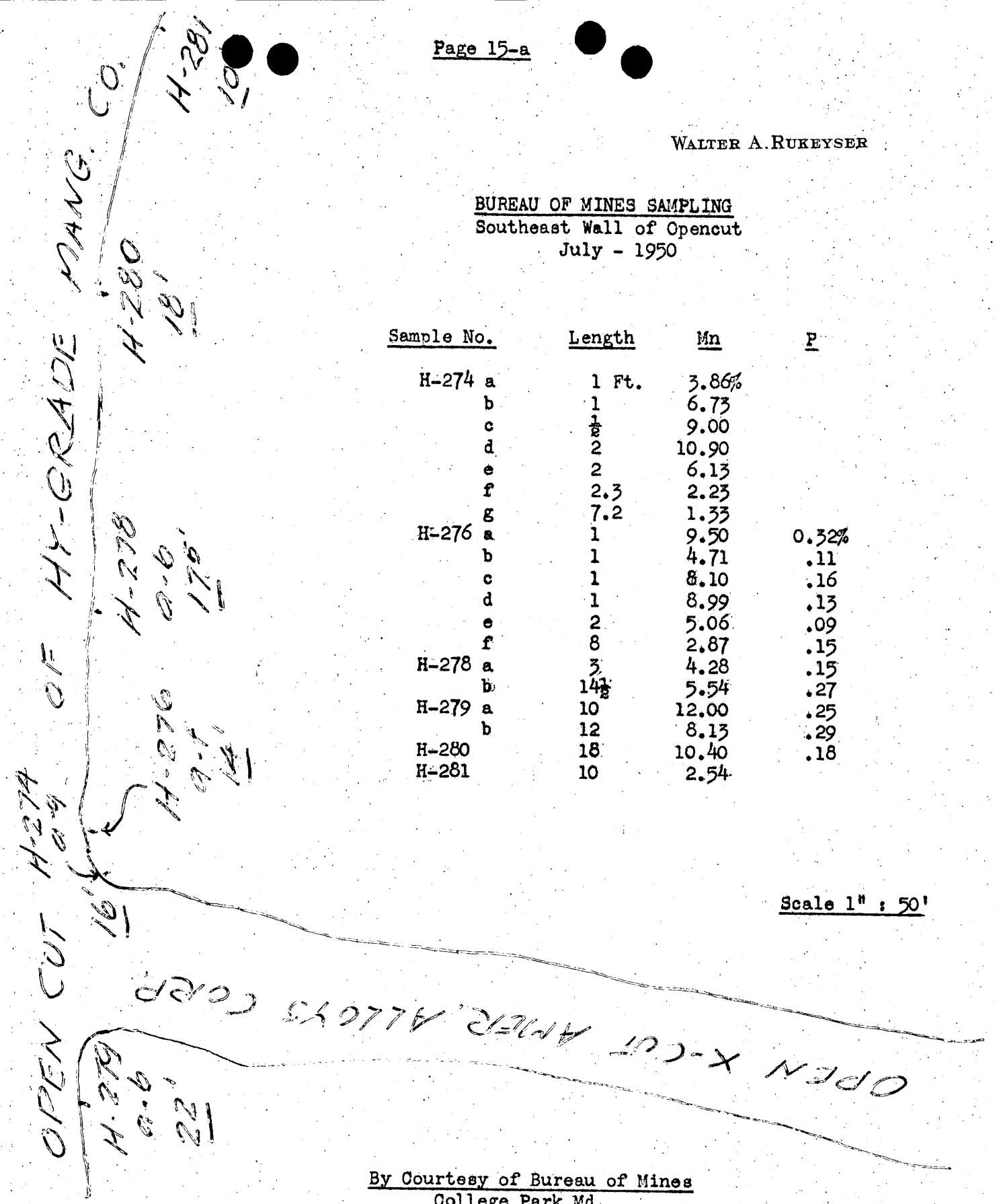
It is therefore unfortunate that this report must be rendered before the results of this sampling are determined.

WALTER A. RUKEYSER

BUREAU OF MINES SAMPLING
Southeast Wall of Opencut
July - 1950

Sample No.		Length	Mn	P
H-274	a	1 Ft.	3.86%	
	b	1	6.73	
	c	½	9.00	
	d	2	10.90	
	e	2	6.13	
	f	2.3	2.23	
	g	7.2	1.33	
H-276	a	1	9.50	0.32%
	b	1	4.71	.11
	c	1	8.10	.16
	d	1	8.99	.13
	e	2	5.06	.09
	f	8	2.87	.15
H-278	a	3	4.28	.15
	b	14½	5.54	.27
H-279	a	10	12.00	.25
	b	12	8.13	.29
H-280		18	10.40	.18
H-281		10	2.54	

Scale 1" : 50'



By Courtesy of Bureau of Mines
College Park, Md.

DIAMOND DRILLING:

It appears from the study of Grasty's surface map, No. 4 that considerable drilling had been done prior to 1927; but apparently only along the outcrop. Unfortunately again, no record of the results of this drilling appear to be available and no reference is made by Grasty to the results.

The only recent drilling consists of one hole attempted by the Bureau of Mines in August 1951. This was put down, using B-core (about 1-3/8" diam.), to a depth of 96 feet at which point both the hole and the drill-tools were lost. The hole therefore did not reach the ore-horizon, having bottomed apparently in the leached sandstone which geologically overlies the ore. Log of this hole follows herewith.

Mr. Burmiester, the Bureau of Mines Engineer who put down this hole, stated at College Park that in his opinion the blocky, clayey and fractured nature of the formations make diamond drilling impractical if not impossible, at least for sampling purposes.

LOG OF DIAMOND DRILL HOLE # 1
BUREAU OF MINES
AUGUST 1951

Elevation at collar:	1433 feet
Angle of hole:	60° approx.
Direction of hole:	N.W. "
Location:	400 feet mag. S 25° W from portal of Tunnel #6 and 100 feet N.E. of road (approx.)
Size of core:	"B" - about 1-3/8" dia.
Length of hole:	96 feet.

Footage	Description
0 - 5	Overburden
5 - 20	Sandstone
20 - 38	Rusty sdst.
38 - 53	Red clay
53 - 63	Leached, rusty, decomposed sdst.
63 - 88	Yellow clay
88 - 92	Leached sdst.
92 - 96	? (Tools lost, hole abandoned)

Note: The hole did not reach the ore-horizon.
Ended at an elevation approximately that of #8 Tunnel-level.
Geologic conditions would indicate ore beneath.

ORE GRADE

(Note: - Weighted average is sum of foot-width of each sample times percent metallic manganese divided by total foot-width.)

Surface Residual Ore

Data	Description	Length	Weighted Averages Met. Mn.	Width
1950	From 6 Bureau of Mines Channels - SE face open pit.	400 ft.	7.14%	16¼ ft.
1950	From 5 Grabs to Southwestern Engineering Co. - North Cut.	100 ft.	12.04%	?
1927	From 2 Grasty channels Shaft #12 and 1, open-cut #14.	75 ft.	12.82%	3¾ ft.
	13	575 ft.	10.10%	Not significant.

Underground Replacement Ore.

	Feet #6 Tunnel-level from Adit			
1927	From 9 Grasty channels 40 ft. N - 130 ft. N	90 ft.	28.33%	7.83 ft.
1927	6 " " 190 ft. N - 250 ft. N	60 ft.	30.86%	5.90 ft.
1927	12 " " 20 ft. S - 140 ft. S	120 ft.	29.27%	8.00 ft.
1927	42 " " 190 ft. S - 690 ft. S	500 ft.	27.20%	7.84 ft.
	69			
	4 Ore-shoots in 1200 ft. of drift total:	770 ft.	27.94%	7.70 ft.

Comments on Ore Grade:

Surface: The weighted average of the 13 samples, 10.10% corresponds very closely to what has been reported to the writer as the grade mined in the past during open-cut operations of the Hy-Grade Manganese Company. However, Mr. Guthrie does not consider that what is left of these residual ores will run better than 8% ("between 6 and 8%"). Therefore the Bureau of Mines weighted average (for 400 feet in length of the southeast wall 16¼ feet high) of 7.14% (say 7%) should be assumed as the expectancy from this class of ore.

Underground.

#6 Tunnel-level

From the above table it can be seen that in a total drift length of about 1200 feet there were 4 quite definitely defined ore-shoots totalling 770 feet in length. This gives a factor of o.64, or roughly two-thirds, as the expectancy of the ratio of ore which can be developed in respect to drift-length in any new development work attempted. In the intervening ground between the shoots the lean sections are represented for the most part by a content of less than 5% metallic manganese.

It is worthy of note that in the ore-shoots the range of the weighted average content is only from 27.20% to 30.86% whereas the overall average is 27.94%. In other words, this drift showed a remarkable uniformity of grade of ore particularly for a replacement type of orebody.

#8 Tunnel-level

It is unfortunate that for purposes of later calculations of ore-reserves, this #8 Tunnel-level is represented by only 2 samples. The first of these is described as having been taken by Grasty 280 feet in from the portal and represents a thickness of 6 feet opposite the northeast drift. The percent metallic manganese is given as 5.43. The second sample was cut 20 feet west of No. 1 (i.e., still cross-cutting the ore) and 3.50 feet gave 12.47%. There is a notation that the latter was taken in a section of ground showing a crushed-zone mineralized over a greater distance than sampled. Grasty in his "Section A-B" shows a fault at approximately that point in the #8 Tunnel. Hence, it is believed that the results of the two samples which constitute the entire information concerning grade on this level cannot be taken as representative of grade expectancy.

On the other hand Mr. Guthrie was firm in his statement to the writer that work on this level (drifting) done subsequent to the date of Grasty's report continues to show only low-grade ore. No stoping, therefore, was done from this level particularly in view of the low prices prevailing at the time of shut-down. However, it is his opinion that ore of the same grade as represented by the sampling of the #6 Tunnel-level can be expected for a vertical distance of 40 feet below, or to a point midway between #6 and #8. Where winzes were put down from the #6 level the grade of ore encountered therein substantiated this statement.

South Tunnel

The average of 6 samples taken from the South Tunnel, from raises and from the open-cut directly above give an average of 32.40% over 6 feet.

Lineweaver Tunnel

The Lineweaver extends but a few feet below the surface at approximately station 33 + 00 and there is only one sample recorded from this virgin and what may be an important section of the mine for the immediate future. This sample showed 36.61% Mn. over 5½ feet at the end of the drift driven southwest a length of for about 50 feet. All this can be said to represent is good indication that ore does exist in this section of the property and of a grade at least equal to that encountered between the surface and the #6 Tunnel-level elsewhere in the mine. This must be borne in mind when the later section of this report dealing with recommended development work is read.

Special Samples

Under a previous section dealing with the history of the property the results from several composite samples of mine-ore have already been given. All of these were considerably higher in grade than the 27% which the writer has concluded to be conservative as to the grade of underground ore which can be expected where ore-shoots are encountered in the future.

WALTER A. RUKEYSER

ORE RESERVES:

Following are the definitions of the various classes of ore-reserves as used in this report:

Proven Ore - Ore developed on 3 sides,- or where adjacent to proven ore and developed on 2 other sides.

Probable ore - Ore developed on 2 sides only,- or where adjacent to a a proven or mined-out block and exposed on at least 1 other side.

Possible ore - Ore not adjacent to a proven or mined-out block but developed on 1 side plus a reasonable expectancy from ore-shoot experience and a study of geology.

SUMMARY OF ORE-RESERVES

	@ 10 cf/t	Tons
OPEN-CUT: (Not including stripping down-dip of replacement ore)		
Probable: Block A		
Replacement; 21 00 to 33 00 = 1200 x 7.7 x 65 x 100% @ by 64% :		38,000 (60,000)
Block B		
Residual ; 11 00 to 21 00 = 1000 x 20 x 10 x 100% @ 20cf/t		10,000
Total Probable Surface Ores:	48 - 70,000 Tons	
Possible: Block C		
Residual: 11 00 to 6 00 = 500 x 20 x 10 x 100% @ 20 cf/t		5,000
Total Probable and Possible Surface Ores:	53 - 75,000 Tons	
Percent recoverable:	100	
UNDERGROUND:		
Proven: Unknown remaining in Block II 11 00 to 18 00; 36-level to surface, 175 net ft. along dip @ 7.7ft. wide x 0.64 ore-shoot length @ 10 cf/t.: originally (before mining 1927-1932) 65,000 t. gross. Remaining available for future mining:		?
Probable: Block II 18 00 to 21 00; 36-level to surface. 175 net ft. along dip @ 7.7ft. wide x 0.64 @ 10 cf/t. Percent mined out unknown. Gross, before mining		27,000
Block III 11 00 to 7 30; 36-level to surface x 175 x 7.7 x 0.64 @ 10 cf/t		33,000
Block IV To 40 ft. vertically below Block I - 75 ft. along dip 75 x 7.7 x 700 x 0.64 @ 10 cf/t		28,000
Total Probable Underground Ores, Gross before Pillars, etc.		88,000
" " " " , Extractable @ 50%		44,000
Possible: Block V 21 00 to 33 00; 36-level to surface after open-cutting Surface slopes toward northeast downward from el 1548 to 1478 (approx.), making triangular-shaped block: $\frac{1200 \times 7.7}{10} \times \left(\frac{175 + 0}{2}\right) \times 0.64$		55,000

WALTER A. RUKEYSER

Possible (cont'd): Block VI

From 7 50 to 6 00 x 125 ft. up dip (50 ft. off because of squeeze on #6-level) x 7.7 x 0.64 @ 10 cf/t. 10,000

Block VII

40 ft. vertically or 75 ft. down-dip under Blocks III, 75 x 350 x 7.7 x 0.64 @ 10 cf/t 14,000

Block VIII

From #6-level 40 ft. vertically, or 75 ft. down-dip below Block V: 75 x 1200 x 7.7 x 0.64 @ 10 cf/t. 47,000

* * * * * *

Note: Ore potential below new, proposed level 40 ft. vertically below #6, while considered possible, is not taken into consideration for purposes of this report. The same applies to ore possibilities northeast along strike beyond sta. 33 00.

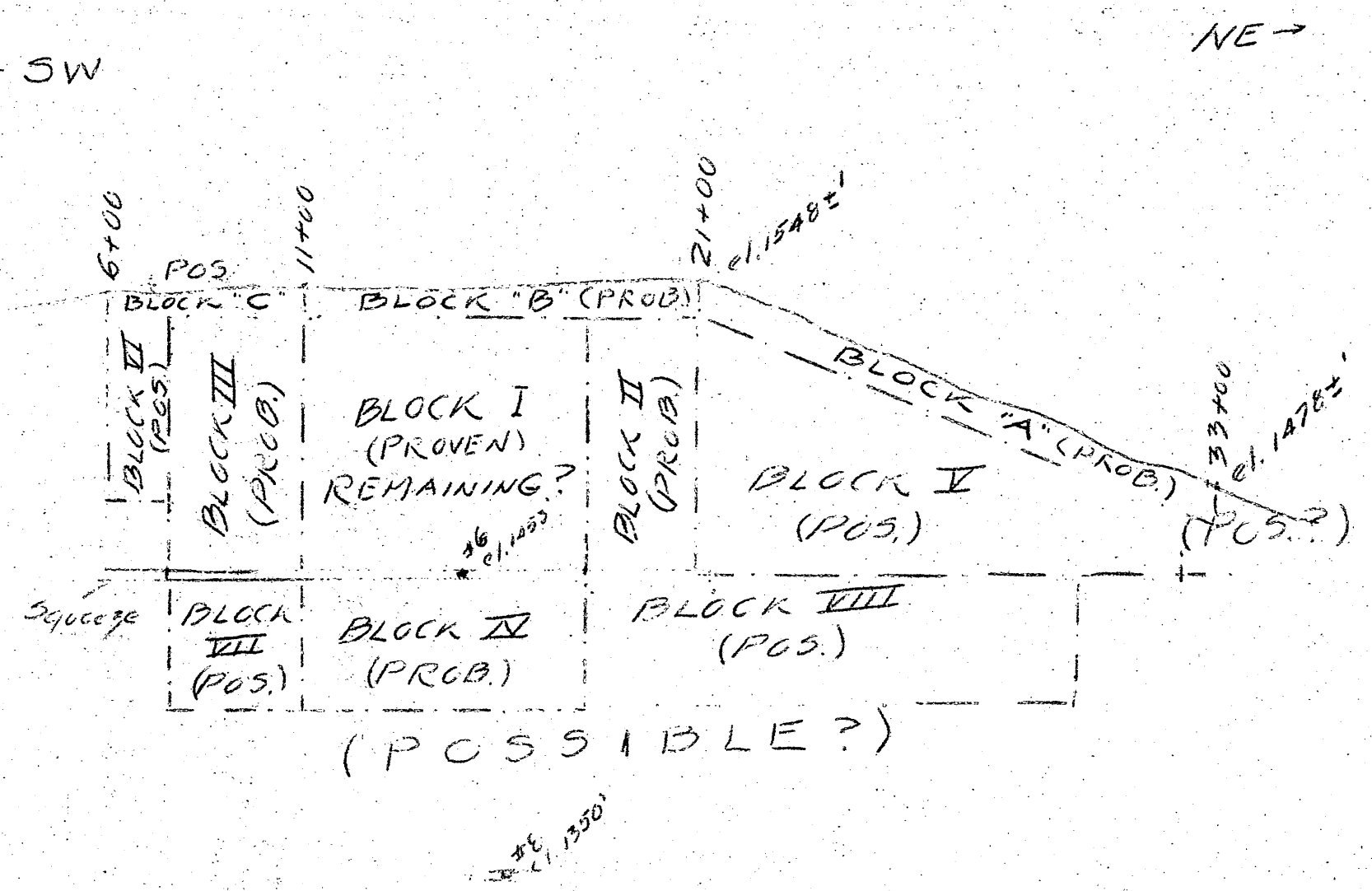
* * * * * *

Total Possible Underground Ore, Gross Before Pillars, etc.	126,000
" " " ", Extractable @ 50%	63,000

Recapitulation of Ore-reserves:

Total Proven, Extractable	Unknown, believed little, if any
" Probable, " , Surf. & Undrgd.	92,000 - 114,000
" Possible, " , " " "	68,000
TOTAL ESTIMATED RESERVES ALL CLASSES:	160,000 - 182,000

Note: The difference between the lower and higher figure depends on whether the ore developed after stripping of overburden from the surface between sta. 21 00 and 33 00 is of the replacement or residual type as put in sight for open-cut mining. If the former, the ore-shoot factor 0.64 must be used; if residual, -it may be assumed all the ore developed along the strike-length will be typical of that lower grade.



SCHEMATIC DIAGRAM
SHOWING
BLOCKS OF ORE RESERVES
HOR. SCALE: 1" = 400' APPROXIMATELY
VERT. " 1" = 50' "

WALTER A. RUKEYSER

WAR

WALTER A. RUKEYSER

RECOMMENDED EXPLORATION AND DEVELOPMENT

Surface

For the purpose of immediately developing easily accessible ore-reserves on the surface the writer recommends extending the present open-cut, which now terminates at about station 21 + 00, northeast to station 33 + 00, a distance of an additional 1200 feet. The rather meager information concerning this ground comes from a series of scattered shafts, prospect-holes, test pits, a cross-cut and the Lineweaver Tunnel and drift. Most of the shafts which have reportedly encountered ore (See Grasty's plan of the surface workings No. 4) are from 20 to 35 feet deep and in one, ore is reported in the bottom at 75 feet. Grasty gives two geologic sections, one at each end of the 1200 feet in question; and the overburden seems to run from 25 feet - 35 feet in depth at the southwest-end to possibly 20 feet at the northeast. It is therefore apparent that to develop ore for open-cut mining this distance along the strike warrants stripping by power-shovel or bulldozer. Due to the monocline, with its duplication of the beds at the surface at or near the crest of the ridge, the ore to be mined appears to comprise a width at the southwest-end of approximately 50 feet and at the northeast end of possibly in excess of 75 feet.

The cost of removing the overburden-soil, sand, clay, and sandstone-rock-for an average width of 65 feet, an average depth of 30 feet, and over a length of 1200 feet is approximately $60,000 for removing the slightly less than 100,000 cubic yards estimated.

Were ore to be encountered for the entire length, this $60,000 should expose an average width of flat-lying ore of say, 65 feet having a thickness of approximately 8 feet which, at 10 cubic feet to the long-ton, (Grasty gives the weight per cubic foot of ore in place as 220 lbs.) results in something in excess of 60,000 tons. The cost per ton of ore developed is thus $1.00. In the case of surface ores it is not believed necessary to use the ore-shoot factor of o.64.

Should this cost for developing this entire distance be excessive for the present budget, a distance of 300 feet from station 21 + 00 to station 24 + 00 could be attempted immediately at a cost of $15,000 to develop 15,000 tons of ore.

The grade expected would, under optimum conditions, be that of replacement-type of ore typical to that mined on the #6 Tunnel level say, 27%. The lowest expectancy would be the 7% resulting from the Bureau of Mines channel-sampling reported above. Actually it is believed conservative to expect a grade of 10% such as has been reputed for the residual mined at the surface in the past.

Underground

It is further recommended that a new tunnel be driven into the eastern-slope of the ridge 40 feet vertically below the No. 6. This should give an approximate 75 feet of stoping distance up the dip between the proposed tunnel and the No. 6. The portal of this tunnel, in the opinion of the writer, should be 200 feet southwest of the centre-line of #6. The distance required to reach and cross-cut the ore-zone and also explore the underlying limestone would be approximately 250 feet. Drifts would then be run simultaneously to the southwest and northeast on the ore, for a distance at least corresponding to that of the high-grade shoots mined from the level above - about 1200 feet.

Mr. Guthrie has told the writer that the #6 Tunnel stood without timber until widened to facilitate tramming. Also, certain sections of the #6 drift did not require timber. However, for purposes of conservatism timbering has been included in the estimated cost for this work. The cost per foot should not exceed $20 average for both tunnel and drift (see detailed cost estimates which follow in a later section.)

It is believed that a conservative minimum of 5 feet a day can be advanced in the tunnel. Hence, to penetrate the ore-horizon and the foot-wall limestone, should require approximately 50 working-days, or two months. The northeast and southwest drifts can also be advanced 5 feet per day each. Inasmuch as it is planned to have the new tunnel intersect the ore-zone above at approximately its central point, each drift will be approximately 600 feet long. The drifting should thus take approximately 120 working-days. Estimating the first month for the adit and five months for the drift, this new level could be developed in a total of 6 months during which time the surface-cut mentioned above could have been completed.

At $20 per lineal foot including timber, track, etc. the 1450 - 1500 feet of underground work is estimated to total $30,000.

Using the ore-shoot expectancy of 0.64 as in the level above, the resultant 770 feet of ore-shoots, having an average expectancy of 7.7 feet wide, with a distance along the dip of 75 feet would contain a total of approximately 45,000 long-tons gross. Allowing for pillars, it is believed conservative to expect 30,000 tons as extractable from this block of ground were ore so developed. The cost per ton of extractable ore would thus be $1.00 for the proposed development. Since it is believed that the information derived from the #6 level can be extended downward the short distance of 40 feet vertically, this coupled with the results of the new proposed drifts, should place such new ore between these two levels in the proven class. Hence, any raises driven to the #6 level would be primarily for the purpose of mining the block and would be charged to the extraction of ore rather than to its development.

WALTER A. RUKEYSER

Should the surface work recommended above develope the expected ore probability (of about two-thirds the total distance explored) to the Linewcaver Tunnel, an additional adit would then be recommended. This, also, might be driven into the eastern slope of the ridge, were the topography to be suitable, and at some point intermediate between stations 18 00 and 53 00. Further, this should be at an elevation suitable so that a drift driven southwest on the ore would connect with the northeast drift of the #6-Tunnel level.

To summarize the development work recommended for the immediate future: 1) An open-cut should be started from the northeast face of the presently existing one, to extend at least 300 feet northeast along the strike of the formation. 2) Approximately 1500 feet of underground work as detailed in a previous paragraph should be driven concrrently.

The total cost of this proposed program is expected to be in the neighborhood of $45,000., not allowing, however, for the purchase of any equipment. This, it is understood, will be rented and is available immediately. (This also applies to machinery and equipment for open-cut and underground mining, at least during the initial stages of the operation.)

METALLURGICAL RESULTS: WALTER A. RUKEYSER

In the addenda will be found a copy of:

1) Proposed Flowsheet prepared by Mr. Paul Bertelson;
2) Results of a Heavy Media Separation Test by Southwestern Engineering Company dated September 25, 1950;
3) A metallurgical balance and estimated operating results based on proposed mill - operation of 24 hours per day, 250 days per year @ 600 tons of 15% Mn content mill-feed per day - to produce 60 long-tons of concentrates daily; and a
4) Complete analysis copied from page 16. of Grasty's report of May, 1927
5) Copy of U.S. Government contract for concentrates.

Comments: The flowsheet as prepared by Mr. Bertelson seems adequate and his metallurgical balance reasonable based on the only test-results available, namely that of Southwestern Engineering on about 100 lb. of 12% ore (Met.'n)

On replacement ore of a grade expected from the samples given by Grasty and the results of jig-table concentration made in the small pilot-mill operations of a predecessor company (Hy-Grade Manganese) better results might be indicated than when operating on lower grade heads. However, in calculating penalties as indicated in the government purchase-order, the writer feels it to be more conservative, especially if 7% residual ores are to be treated at the inception of the proposed operation) to assume a lower grade of concentrate; say, 41% average, met.'n.

Also, from the so-called complete analysis given by Grasty (which the present writer cannot total to equal the 99.53% given by him), the iron content for the concentrates may quite possibly equal that given for the hand-sorted ore, better than 8.5% and the combined silica-alumina content, similarly, about 13%. (This should be the poorest expectancy since washing and concentration should reduce such content in any concentrate). Copper and other such deleterious metals should cause no concern.

The writer, thus, has taken $35.00 per long-ton for the F.O.B. selling-price of the concentrates.

Herewith follows a list of facilities now existing on the property of Virginia Manganese Company and the present replacement value of each. This is followed by a list of the equipment and machinery about to be installed in the mill-building and elsewhere. This latter includes details of proposed Crushing and Washing Plant, Heavy Media Separation, Jigs, Tables, Bins, Truck-ramps, etc. The estimated cost of each item is also shown. The costs as estimated for erection, installation, working-capital and other expenses incidental to putting the property into production are itemized under a later, suitable heading.

Steel hopper grizzly and crusher platform.

Air receiver 36" x 60" 150 cu. ft.

Blower 12" Coppus Engineering Co., Serial No. 6593 Dir. Connected to 2 H.P. Motors.

3" x 4" Gardner-Denver twin cylinder 5" diam. 6" stroke. Plunger Pump 300 RPM 800' head Morse Silent Chain Drive, 15 HP General Electric Motor Type "K" Code F Fram 326. Model 8K326D191 Serial No. ZV12479 3/60/220/440 1745 RPM Ball Bearing.

Sullivan U128 Double Screw 6' column with Safety Clamp.

25" Trunion Laddles, arms 42 Class F Rigid Trunion Cables, 2 Jack hammers Model L 47 1"

3 End Dump Mine Cars 24" Guage.

Crushing & Washing Plant

Jaw crusher - Cedar Rapids 9" x 16" V belt driver 6 V belts "C" 20 HP General Electric Moter 875 RPM 3/60/220. Serial 589939

Log Washer - Bury & Clemens 48" x 15' two 20" steel logs. Goodrich rubber bearings 25 RPM Spur gears. American Pulley Co. 13-1 Reducer 6 "B" B belts. 10 HP Moter Serial No. 305719 1800 RPM 3/60/220.

Bucket Elevator F. Lintz Co. 28' x 13" x 48" steel casing - top taken up. Platform 3 HP U. S. Motor Company gear motor 45 RPM 37-8 rating. Type GD Frame 224-4-30 Code G Serial No. 481923 8.6 amps. 3/60/220/440 1800 RPM.

Vibrating Screen 2' x4" Denver Dillón 1 HP Moter.

Vibrating Screen 3' x 6" RL Johnstone Co. 10 mesh screen Single Deck. Vibrator 8 spray nozzles, screen hopper.

Bucket Elevator Bury & Clemens 18' x 48" x 13".

Heavy Media Separation Plant

Heavy - Media Separating Cone 5' Chain Acme Industrial Equipment Co. 3 HP. Master Gear Motor 5 RPM Type PA Frame 284 RC style 127981 Serial No. RH469.

Vibrating screen 3' x 16' R. L. Johnstone Co. Single Deck. Divided longitudinally to separate sink and float products. Vibrator 12 spray nozzles 3 HP Baldor Motor Frame 27H2 Serial No. P. 14820 9.8 amps. 3/60/220/ 1140 RPM. BB screen hopper and medium storage tank equipped with adjustable deverting plate.

Sand Pump 3" Wimco 20 HP Westinghouse Motor 220/440 Volts 1800 RPM.

Bucket Elevator 35' x 10" x 28" steel casing 2 HP U. S. Motor Co. Gear Motor 56 RPM Type GD Frame Serial No. 204631 Code 1 3/60/220/440 1800 RPM (motor not found).

Conveyor - Bury & Clemens 18" x 22' driven from Elevator.

Concentrate bin 100 ton capacity - steel.

Magnetic Separator Ding's 12" type 125 PC Serial No. 18792 Crocket Type 1 1/2 HP U. S. Motor Co. 68 RPM 260 ratio Type GD Frame 69-5-20 Serial No 591838 Amps. 4.6 3/60/220/440 1800 RPM Code H - BB.

Sand Pump 2" Canadian Allis-Chalmers 2 HP General Electric Motor Model SK 224D10 Frame 224 Volts 220/440 Speed 1735 Serial NO. LZ15089.

Densifier 24" Colorado Iron Works
1 1/2 HP Reliance B. B. Gearhead Type AA Frame 224 1800/430 RPM Parallel shaft 3/60/220.

Demagnetizing Coil - Pennsylvania Coil Co.

Geco Automatic Sampler, 1/4- H.P. motor.

Mineral Jig - Denver Duplex, Serial K-7875.
1 H.P. Louis Allis, Type OGS, Class "P", Form "B". Code G.
Serial No 1051434, 3/60/220/440, 1150 RPM.

POWER REQUIREMENTS:

		H.P.
1.	Crusher	20
2.	Log-washer	10
3.	Bucket-elevator	3
4.	Vibrating screen	1.5
5.	Cone-separator	5
6.	Densifier	1.5
7.	Sand-pump	20
8.	Sand-pump	2
9.	5'x 6' vibrating screen	3
10.	Bucket elevator	2
11.	2' x 4' vibrating screen	1
12.	2 - concentrating tables	2
13.	Belt conveyor	2
14.	Magnetic separator	1.5
15.	5 HP centrifugal pump	5
16.	Main pump	15
17.	Blower	2
18.	Mill air-compressor	25
	Total Connected Load	121.5
	@ 80% Load Factor	96.0
	= 72 KW	

72 KW x 24 hrs. = 1,728 KWH/day
1,728 KWH x 25 days/mo. = 43,200 KWH/mo.

Comments: If 600 tons per day of residue ore @ 7% Mn. content were to be fed to the mill to produce 66 tons (of 2000 lb.) of ccts., it is felt that the above power load and load factor would be considerably increased. The motors @ 25% overload would indicate a demand of approximately 150 HP.

WALTER A. RUKEYSER

ESTIMATED COST OF PLANT INSTALLATION AND WORKING CAPITAL: (to nearest $50.)

Superintendent's salary, Nov.15 - Feb.15	$ 1,050.
Dismantling, painting and loading	1,000
Freight and truck expense	1,000
Concrete (foundations and footings)	1,000
Re-erection, wiring and piping (units all numbered, pipes cut, etc.)	2,000
Oxy-acetylene torch and supplies	450
Grizzly	250
1 - 1.5 HP motor, 1140 rpm	150
1 - 2. HP " , 1800 "	150
Belt for magnetic separator	100
2,500 ft. 2" pipe and couplings	1,750
7,500 ft. wire for pump installation	750
10 tons ferro-silicon @ $135.	1,350
2 " magnetite @ $60. plus freight (	130
Travel	1,000
Local Taxes	125
Misc. Labor	750
Truck registration and insurance	500
Power hook-up	11,250
Lumber for forms	250
Repairs to buildings	500
Loading and unloading ramps for cots.	1,000
30 - day payroll @ minimum	3,000
Misc. supplies	1,000
Insurance (compensation, fire, liability, etc.) pro-rata for 2 months @ $5,000/yr.	850
Boarding-house loss at $10./day, 60 days	600
Advance rentals or deposit on equipment	?
Explosives and conversion of old tunnels for powder-magazine and cap-house	300
Unforeseen contingencies	2,700
Total:	$25,000

ESTIMATED OPERATING COSTS

(Based on Output of 60 Long-tons Cots.per Day)

1) Open-out- Residual Ores
(7% Mill-heads - 600 Short-tons/day)(Of.metallurgical balance)

		Per Day
Mining:		
Rentals:	1 power-shovel (1 yd.) @ $20./hr. x 8 Hrs.	$ 160.
	2 "dozers" (D-6 or D-8) @ $10/hr " "	160
	1 compressor (250 cfm or larger) @ $10.	80
	2 dump-trucks (3-4 t.) @ .40/truck-mile	80
Supplies:	Explosives - where required	30
	Drill-steel,bits,airlines,receivers,etc.	30
		$540.
Labor (company payroll):		
	1 surface sup't.	20
	1 engineer-surveyor	10
		570.
	Unforeseen Cont.	30
	Total Mining:	$600.
Milling:		
Labor:	3 crusher-men (1 per shift) @ $1.00/hr.	24
	6 mill-men (2 " ") "	48
	1 mill-sup't. - master mechanic	15
		87.
Power:	3000 kwh/day @ .015	45
		45.
Supplies:		
	Heavy media replacement @ .10/t.for ½ or 300t.	30
	Lubricants,etc.	13
	Replacements & maintenance	25
	Total Milling:	$200.
Cots.Handling:		
Labor:	2 laborers for loading and unloading @ .90 x 8	14.
Trucking:		
	66 short-tons, 1 10-t truck - 6 trips - 150 mi/d @ .40 per truck-mile	60.
	Total Cots.Handling:	$75.
General Expense:		
Labor:	1 Manager @ $750/mo.	30.
	1 bookkeeper - storekeeper @ $250	10
	1 laboratory technician @ $250	10
	1 stenographer @ $150	6
	2 general surfacement(roads,pumps,etc.) @ .90	14
		$70.
Misc.:	Boarding-house loss	20.
	office and eng'r'g.supplies	10
	tel. & tel.	5
	assay supplies & lab.power	50
	account'g & legal @ $500/mo.	12

WALTER A. RUKEYSER

General Expense (cont'd):

travel, etc.	20.
insurance (fire, liability, etc.) @ $5000/yr.	20
local taxes @ $2000/yr.	8
other	10
Total General Expense:	$225.

Total Costs per Day before Federal or State Taxes: $1100.
" " per short-ton of ore: $1.833
" " per long-ton of cots.: $16.67

2) Open-cut - Stripping Replacement Ores Down Dip (for Possibly 100 feet.)

Ratio waste : ore @ 7.7 ft. thickness = 1200 : 300
12 - 15 % Mill-heads - 300 sort-tons of ore per day.

Mining:

Rentals: (Of above for Residual Ores)		600
Add: shovel and dozer hours		160
truck-hours		80
	$840.	
Supplies:		
Explosives		60
	$ 60	
Total Mining Costs:	$900.	

Milling:

Labor: 3 crusher-men @ $1.00/hr.		24
3 mill-men "		24
1 mill sup't.- master mech.		15
	$63.	
Power:		
2000 kwh./day @ .015		30
	$30	
Supplies:		
H.M. replacement @ .10/t. - 150 t.		15
lubricants		12
replacements and maintenance		15
	$42	
Total Milling Costs:	$135.	

Cots. Handling:	$ 75.
General Expenses:	$225.

Total Costs per Day before Federal or State Taxes: $1335.
" " " Short-ton Ore: $4.450
" " " Long-ton Cots.: $20.23

WALTER A. RUKEYSER

3) Underground Mining of Replacement Ores
120 short-tons/day @ 7.7 ft. thickness before overbreak
27% Mn.: in-place assay; 20%(approx.): Mill-heads

Development: 2 drifts or sub-drifts & 2 raises

Labor:

4 machine-men @ $1.25/hr.		40.
4 helpers @ $1,00		32
4 timbermen @ $1.25		40
8 muckers @ $1.00		64
4 trammers @ $1.00		32
3 compressor-dumpmen (charged to mining)	$206.	

Supplies:

Explosives: 75%dyn. @.20;50 caps @.20-		20.
Drillsteel and bits		10
timber; 200 bft. x 4 = 800 plus waste, @$120/M		110
air: comp.rental @ $2.00/hr.plus 2 gals oil/hr. @ one-half of total for 24 hrs.		30
track: 12# rail,ties,etc. for 10 ft.track/day		20
pipe,etc.	$200.	10
Total development costs:	$408.	

" " " @ 20 ft. advance/d say, $20.00 per foot.

Stoping(by Slicing &/or Sublevels)

Note: 120 t. @ 10 cu.ft./long-ton = 1200cf net excavation per day (not including overbreak,- 20 - 25% dilution);over av.w. of 7.7 ft. = approx. daily stope-length of 25 ft. x 6 ft. in height.

Labor:

21 miners (3 shifts) @ $1.25/hr.		210.
21 helpers @ $1.00		168
6 timbermen (chutes,stulls,etc.) @ $1.25		60
6 trammers @ $1.00		48
3 compressor-dumpmen @ $1.00		24
2 track and pipe-men @ $1.25		20
3 shift-bosses @ $2.00		48
1 mine-sup't. @ $500./mo.		200
	$598.	

Supplies:

Explosives: 100% plus 50 caps		30
drillsteel and bits		20
air; one-half		30
timber (stulls,etc.)		200
pipe,hose and misc.		80
	$360.	
Total Mining Costs:	$958.	
Plus Developm't:	$408	
Total Underground Costs:	$1366.	

Total Cost Underground Ore per Short ton : $11.40
" " " " " " " to mill: $11.50

Daily Cost Underground Ore to Mill:		$1378.	
Milling:			
Labor:	(cf. above)		63.
Power:	1800 kwh. @ .015		27
Supplies:	H.M. replacement for 60 t. @ .10		6
	lubricants		13
	replacements & mainten.		15
	Total Cost Milling:	123.	
Octs. Handling:	(cf. above)	75.	
General Expenses:	"	225.	
Total Daily Cost Underground Ore Before Fed. & St. Taxes:			$1801.

Total Costs per Day Before Federal or State Taxes:		$1801.
" " " short-ton underground ore:	$15.00	
" " " long-ton Octs.:	$27.30	

CUTOFF POINT FOR UNDERGROUND ORE

With total daily costs for 100% underground ore to mill at $1800. and with concentrate value of $55.00 per long-ton, - 31 tons of concentrates must be produced to break even. With a manganese content of 41%, the concentrates at 100 % extraction would have to contain 213 lb. metallic manganese for each ton of ore from which they are derived.

The cutoff point at which profit is estimated to vanish thus appears to be when the in-place assay shows 10 long-ton units per short-ton of ore. After dilution of from 20 - 25%, the cutoff point appears to be say, between 13 and 14% in-place grade; and, at 80 - 85% mill extraction, somewhere at approximately 15%.

WALTER A. RUKEYSER

ESTIMATED PROFITS:

It has been concluded that a reasonable expectancy, after penalties, per long-ton of concentrate produced is $55.00. All costs estimates have been predicated upon a production rate of 60 long-tons of such concentrates. If realized, the estimated daily income should then gross $3300.

At the daily cost estimated for producing 600 short-tons of open-cut, residual ore having a manganese content of 7%, namely - $1100., the expected profit per day would be $2200. for the probable and possible life of such ores (43,000 to 65,000 tons @ 600t/d.) or some 70 to 110 days. The gross operating profit might thus be in the order of $150,000.

In the case of strip-mining replacement ores by removing overburden and hanging-wall material down the dip, - economically possible for perhaps 100 feet, - the daily costs were estimated at slightly over $1300. which would provide an estimated profit of $2000. per day. The life of such operation would to a great extent depend upon how much of the proven ore between 76-Tunnel-level and the surface remains and can be so mined. Of the possible ore, probably 25,000 tons can be so mined; and, at the grade expectancy for such ore, 27%, the supply should feed the mill for some 200 days. The gross operating profit expectancy would be about $400,000.

Finally, in the case of the probable and possible underground replacement ores (grade expectancy, again 27%), the daily operating costs were estimated at some $1600, and the profit might be thus assumed to be $1500. The tonnage for both probable and possible ores of this category totals something less than 110,000 tons extractable, - or nearly 1000 days mill-supply. The gross operating profit, before write-offs, on such ore, were the tonnages and costs to be realized, might thus be in the order of $1,500,000.

In other words, before state and federal taxes, depletion, depreciation, interest and return of capital, were the ore expectancy from proposed development and operating costs to be realized (and were the market for the metal to continue strong), there seems to be an excellent possibility that this property could produce some $2,000,000 in operating profit. The period of time involved would be somewhere in excess of 5 years.

CONCLUSIONS:

The writer is not familiar with the terms of acquisition of the property nor the distribution of equities. However, considering that a combined log-washer, jig, table and heavy media plant is available and is actually now (so it is said) being moved onto the site, the relatively small amount of capital required to place the mine in operation, coupled with the excellent chance of further ore development places the venture in the class of an attractive mining risk. The expenditure of such risk-capital is recommended.

Respectfully submitted,

Walter Arnold Rukeyser

December 28, 1951
Orig. and 2 cc. Mr. Richard
1 c. WAR office file.

WALTER A. RUKEYSER
CONSULTING ENGINEER
60 EAST 42ND ST.
NEW YORK CITY 17
MU.7-7431

January 7,1952

Mr. Auguste Richard
39 Broadway
New York City,4

Dear Mr.Richard:

Supplementing my report of December,1951 and its accompanying letter of transmission dated December 28,1951, I am now in a position to state the exact extent of the manganese properties under consideration. The property comprises 260.66 acres.

Furthermore,titles were searched by Richard Sloan Wright, Esq. of Woodstock,Va. and are reported to be quite in order.

Very truly yours,

Walter A. Rukeyser

WAR/r
cc - 2

ADDENDA "A"

SOUTHWESTERN ENGINEERING COMPANY
Los Angeles 11, California

METALLURGICAL LABORATORY

RESULTS OF A HEAVY MEDIA SEPARATION TEST CONDUCTED ON A COMPOSITE OF FIVE SAMPLES OF MANGANESE ORE RECEIVED FROM MR. ERNEST L. BAILEY, CHARLESTON, WEST VIRGINIA (SWECO LOT NO.3178)

Results Based on Total Crude Ore

	%Wt.	% Mn	% SiO_2	% Distribution Mn	Ratio of Concentration
Calculated total crude ore	100.0	12.04		100.0	
Slimes (untreated)	25.8	5.00		10.7	
-6 mesh sands (untreated)	23.9	12.10		26.0	
HMS feed (2" + 6 mesh)	50.3	15.19		63.3	
HMS sink	14.8	41.66	9.26	51.2	6.8:1
HMS middling	1.7	23.22		3.3	
HMS float	33.8	3.13		8.8	
Combined HMS sink and middling	16.5	39.8		54.5	6.1:1

Results Based on HMS Feed

Calculated HMS feed	100.0	15.19		100.0	
HMS sink	29.5	41.66	9.26	81.0	3.4:1
HMS middling	3.4	23.22		5.2	
HMS float	67.1	3.13		13.8	
Combined HMS sink and middling	32.9	39.8		86.2	3.0:1

Test Procedure: The five samples received were identified as No.1 - Residual ore from North cut, No.2 - From south side of North cut opposite sample No. 1, No. 3 - From center of North cut, No. 4 - From corner of cross cut of North cut, No. 5 - Ore from the south face of North cut between cross cuts 1 and 2. The samples weighed respectively 10,728, 11,220, 6,680, 8,090 and 7,234 grams.

The above samples were thoroughly mixed, then cut in half by taking two opposite quarters. A composite was made up representing one-half of each sample in the proportion received. This composite sample was screened dry on 6 mesh, then the oversize was soaked with water in order to disintregrate lumps of clay and soft material. This soaked and well mixed ore was rescreened on 6 mesh and the oversize was thoroughly sprayed to remove adhering fines, then was allowed to drain. The drained + 6 mesh ore was separated in ferrosilican medium of 2.52 sp.gr., producing a sink and a float product. The sink was re-separated in medium of 2.74 sp.gr. resulting in the sink and middling products reported above. Dry screening removed about one-third of the total ore as -6 mesh fines, while wet screening removed an additional 16%. the -6 mesh fines were classified into sand and slime products as shown above. No attempt was made to treat the sands but several preliminary trials employing froth flotation were made on the slime. Owing to the low manganese content and tendency for gangue to float, froth flotation of this product does not seem feasible.

ADDENDA "B"

VIRGINIA MANGANESE COMPANY, INC.

Metallurgical Balance and Estimated Operating Results
24-hour operation, 250 days per year, 600 tons per day

Material	%	Tons	Assay	Tons Mn	Waste Tons	Assay	Conc. Tons	Assay
Crude Ore		600	15.5%	90.00				
Slimes	25	150	5.0	7.50	150	5.0		
Screen Feed		450	18.3	82.50				
-10 Mesh	33	150	15.0	22.50				
HMS Feed		300	20.0	60.00				
HMS Conc.	85%R	112	42.0	51.00			112	42
HMS Tails		118	4.8	9.00	188	4.8		
Jig Feed		150	15.0	22.50				
Jig Conc.	50%R	27	42.0	11.25			27	42
Table Feed		123	9.2	11.25			1	
Table Conc.	50%R	13	42.0	5.62			13	42
Table Tails		110	5.0	5.62	110	5.0		
					448	4.9	152	42
HMS Conc.		112						
-¼"		48						
Unsintered		64					64	42
Sinter Feed		88	(48 + 27 + 13)					
Sinter Loss		9						
Sinter Conc.		79					79	46
							143	44.2
					Minus 16% for contingencies		23	
							120 = 30,000 tons/yr.	

Ratio of Concentration & Recovery based on deslimed material before sintering.

$$K = \frac{c - t}{f - t} = \frac{42 - 4.9}{18.3 - 4.9} = 2.77 : 1 \qquad R = \frac{51.0 - 11.25 - 5.62}{82.5} = 82.2\% \text{ over all}$$

ADDENDA "C"

VIRGINIA MANGANESE COMPANY, INC.

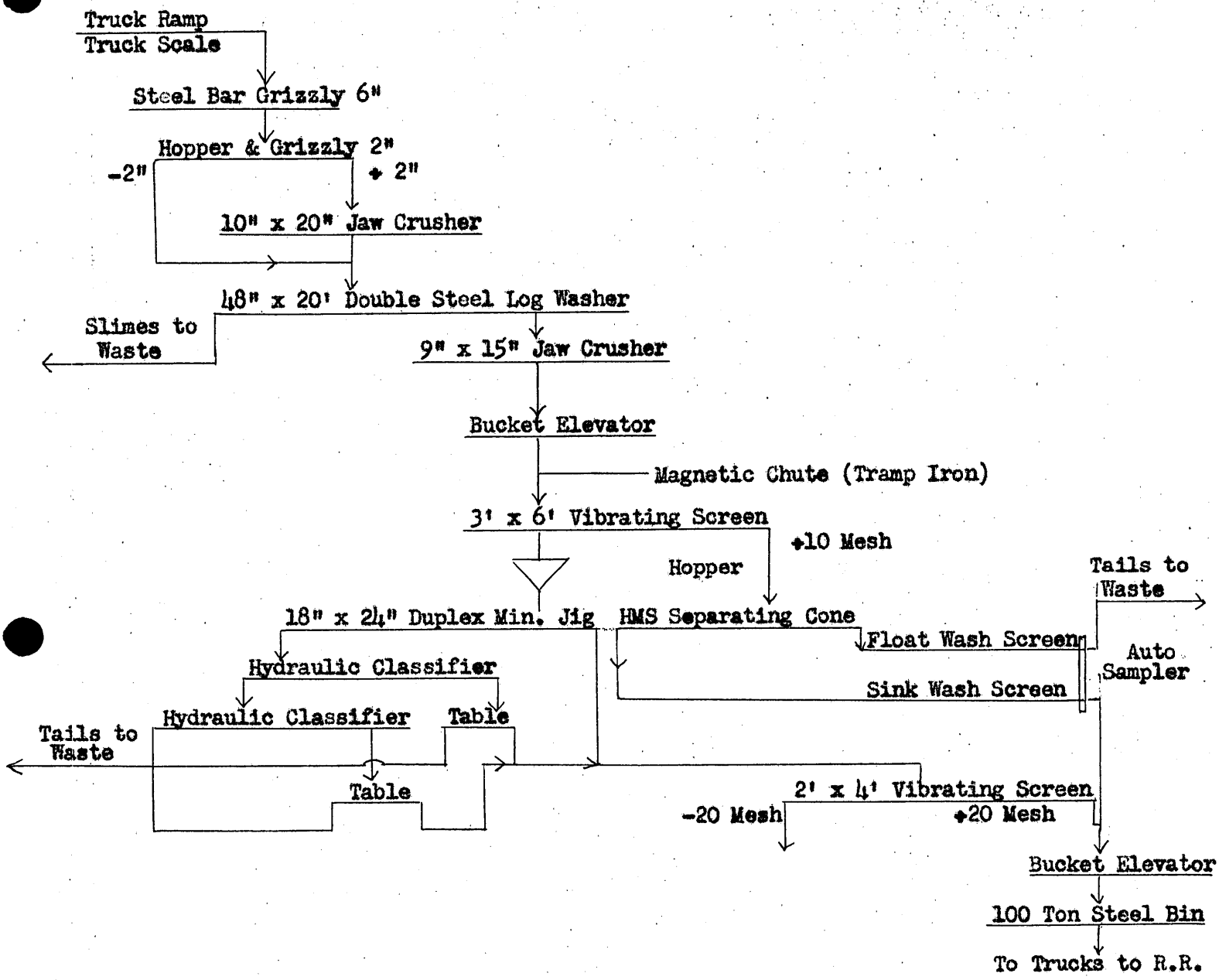
Complete Analysis

Silica (SiO_2)	8.50%
Metallic Manganese (Mn)	46.10
Manganese (MnO_2)	72.91
Metallic Iron (Fe)	6.03
Iron Oxide (Fe_2O_3)	8.61
Aluminum Oxide (Al_2O_3)	4.31
Calcium Oxide (CaO)	1.30
Magnesium Oxide (MgO)	1.34
Phosphorous Oxide (P_2O_5)	.13
Barium Oxide (BaO)	.29
Cobalt (Co)	.59
Zinc	Trace
Sodium Oxide (Na_2O)	.21
Potassium Oxide (K_2O)	.26
Titanium Oxide (TiO_2)	.11
Copper (Cu) Av. of several det.	.06
Water above 105 Deg. C	1.31
	99.55%

Note: The above analysis is from the report of J.S Grasty dated May 1927.

VIRGINIA MANGANESE COMPANY, INC.

Flowsheet: Heavy-Media, Mineral Jig, and Tables.



Note: Medium Recovery Circuit Not Shown.
Water Supply Not Shown.

RESTRICTED

FORM 58
September 1950

GENERAL SERVICES ADMINISTRATION
CONTRACT TERMS

CONTRACT NUMBER	PAGE NUMBER	NUMBER OF PAGES
GS-00P-1693 (SCM)	1	6

Emergency Procurement Service, Purchase Division, 7th and D Streets, S. W.
Washington 25, D. C.

The materials, supplies and/or services to be obtained by this instrument are authorized by, are for the purposes set forth in, and are procured pursuant to the Strategic and Critical Materials Stock Piling Act, Public Law 520, 79th Congress, approved July 23, 1946.

Payment will be made by the Emergency Procurement Service upon the receipt of properly certified invoices, as more particularly provided for in the attached Special Terms, Conditions and Specifications.

DATE OF EXECUTION BY CONTRACTOR December 3, 1951

THE UNDERSIGNED AGREES TO FURNISH THE FOLLOWING ON THE TERMS SPECIFIED ON THIS PAGE AND ON THE CONTINUATION SHEETS, NUMBERED 2 TO 6 INCLUSIVE, AND GENERAL CONDITIONS ATTACHED HERETO AND MADE A PART HEREOF, INCLUDING DELIVERY F.O.B. Railway car Strasburg, Virginia.

METHODS OF PACKING, MARKING, WEIGHING, SAMPLING, INSPECTING AND SHIPPING shall be as provided herein, except as otherwise directed by the Government. Shipping instructions will be furnished by the Government as herein provided.

SCHEDULE OF DELIVERIES Deliveries to begin 4 months after date of Contract, and continue monthly at a rate of 1,250 tons until completion. Entire quantity to be delivered by December 30, 1953.

ITEM NO.	SUPPLIES OR SERVICES	QUANTITY (Number of units)	UNIT	UNIT PRICE	AMOUNT
I	Manganese Ore - Metallurgical Grade Type I, Lump, Guaranteed to comply with requirements of National Stockpile Specification P-30 dated June 29, 1950, incorporated herein by reference and made a part hereof.	Estimated	Long ton unit contained Mn.		
	Approximately 30,000 long dry tons	1,200,000		$1.50	$1,800,000.00
	Material to be supplied under this contract shall have been mined and produced in the United States.				
		Estimated		TOTAL	$1,800,000.00

Discounts will be allowed for payment as follows: 30 Days Net Cash
_____ percent 10 calendar days; _____ percent 20 calendar days; _____ percent 30 calendar days.

CONTRACTOR REPRESENTS:

(1) THAT THE AGGREGATE NUMBER OF EMPLOYEES OF THE CONTRACTOR AND ITS AFFILIATES IS [ ] 500 OR MORE, [X] LESS THAN 500.

(2) THAT HE IS A [ ] REGULAR DEALER IN, [X] MANUFACTURER OF, THE SUPPLIES OFFERED.

(3) THAT HE [ ] HAS, [X] HAS NOT, EMPLOYED OR RETAINED A COMPANY OR PERSON (OTHER THAN A FULL-TIME EMPLOYEE) TO SOLICIT OR SECURE THIS CONTRACT, AND AGREES TO FURNISH INFORMATION RELATING THERETO AS REQUESTED BY THE CONTRACTING OFFICER.

INDICATE WHETHER [ ] INDIVIDUAL: [ ] PARTNERSHIP: [X] CORPORATION. INCORPORATED IN THE STATE OF Delaware

NAME AND ADDRESS OF CONTRACTOR (Type or print)
Virginia Manganese Company
Name
219 Virginia Street West
Street Address
Charleston, West Virginia
City, Zone, State

SIGNATURE AND TITLE OF PERSON AUTHORIZED TO SIGN THIS CONTRACT (Type or print name and title under signature)
Clyde W. Beckner
Signature
Clyde W. Beckner, President
Name and Title

EXECUTION BY THE GOVERNMENT

DATE December 6, 1951

UNITED STATES OF AMERICA

BY H. C. Maull, Jr.
Signature
H. C. Maull, Jr.
Acting Director
Purchase Division
Title

51-7861 CCS

RESTRICTED

GPO - O - GSA 952553 - 47

DMEA
Summary Report
December 31, 1954

Operator:	Old Dominion Manganese Co., Inc.
Address:	Room 2100, 52 Wall St., New York 5, N. Y.
Mine & Location:	Mineral Ridge Mine, Star Tannery, Va. Shenandoah & Frederick Counties, Va.
Docket No.:	DMEA-2359
Contract No.::	Idm-E374
Commodity:	Manganese
Total Cost:	$39,600.00
Government Participation:	$29,700.00 - 75%
Duration of Contract:	July 29, 1952 to January 29, 1954

The purpose of this contract was to further explore an old manganese mine in northwestern Virginia for additional ore reserves.

The program consisted of two stages: Stage I - bulldozer trenching and the sinking of test pits from the bottom of the trenches. Stage II consisted of underground exploration. The authorized cost was $9,000.00 for Stage I and $30,600.00 for Stage II. Stage I was completed in December 1952 with 10 trenches to the south and 14 trenches with 14 test pits to the north of the main open cut. The work aggregated 2,363 feet of trenching, 8.5 feet deep by 10 feet wide and 140 feet of test pitting 5 x 8 feet in horizontal section and 9 feet deep. Good manganese mineralization was encountered on the north side of the main open cut, but the south side showed weak mineralization.

It is estimated that exploration under Stage I developed 166,700 tons of inferred ore having an average manganese content of 22.26 percent. The total cost of exploration was $6,177.22 and the Government's share of costs at 75 percent participation was $4,632.91.

By mutual agreement, Stage II was not entered and a Termination Agreement was signed September 4, 1953.

The Field Team's Interim Report of August 11, 1953 was accepted as a Final Report. The Operator's Final Report was submitted March 3, 1954 and a Certificate of Discovery or Development was issued April 28, 1954.

The Company management objected to the issuance of the Certificate of Discovery or Development, but on July 1, 1954 advised the Executive Officer by letter that sufficient ore had been mined from the area explored under this contract to liquidate the Government's contribution by royalty payments.

Official notification of all sales of production have not been forthcoming although the property has been in nearly continuous operation. No royalty payment has been made to the date of this report. This matter has been referred to appropriate Government officials for administrative action.

/Yes/ Audited

/Yes/ Certified

W[illegible] ANALYSIS SHEET - DMEA PROJECT[illegible]

Analysis as of 12/15/1954
Incl. Voucher for _____

/Yes/ Actual Cost

/ / Agreed Unit Costs

Name Old Dominion Manganese Comapny, Inc.

Docket No. DMEA-2359

State Virginia

Commodity Manganese

Idm-E No. 374

OPERATION	AUTHORIZED Units	AUTHORIZED Cost	COMPLETED Units	COMPLETED Cost	NET COST
Drifting & Crosscutting	1,000'	25,000.00			
Raising					
Shafts					
Winzes					
Drilling (Specify)					
Surface Excavation		5,250.00		4,200.00	6,177.22
Underground Excavation		1,500.00		750.00	
Roads and Trails					
Operating Equipment Purchased					
Surface Rehabilitation & Repairs					
Underground Rehabilitation					
New Building, Improvements, etc.					
Other (Specify) Supervision, Engineering Consultant, Assaying Contingencies		7,850.00		1,227.22	
Totals		39,600.00		6,177.22	6,177.22

Contract terminated by mutual agreement

Prepared by _____

71626

DMEA Form 18
Feb. 58

D[illegible]NSE MINERALS EXPLORATION ADMIN[illegible]RATION

ANALYSIS OF SEMIANNUAL REPORT OF CERTIFIED PROJECT

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

To: Statistics Branch (Code 210)

Report Period

From: Division of Old Dominion Mining Company

DMEA No.	Operator	Contract No.
2359	Old Dominion Mining Company	Idm-E374

ORE ESTIMATES

	Tons	Analysis
DMEA LDT	40,000	20% Mn.
Operator to date	None	
Total	40,000	20% Mn.
Production to date	9,000	20% Mn.
Ore in ground	31,000	20% Mn.

INVESTMENT

Ore mined open pit

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

FACILITIES

Mine Plant		
Mill	Heavy media mill built and then dismantled in 1954.	
Roads		

REMARKS

Mine closed in 1954 and all equipment dismantled 18,000 tons of ore were milled, but only about 9,000 tons of ore were mined estimated to average 20% Mn.

1,140 tons of concentrates were produced, valued at $105,598.00
$4,632.92 in royalties were paid. This paid in full the Government sh share in the project.

Prepared by Thos. L. Chapman. Date

31398

SEMI-ANNUAL REPORTS OF CERTIFIED PROJECTS

Reporting Period June 30 to Dec. 31, 1957 **Date of Examination** None

Operator Old Dominion Manganese Company

Mine Name Mineral Ridge Mine

County and State Shenandoah & Frederick Counties, Virginia

Docket No. and Commodity — DMEA - 2359 (manganese)

Contract No. — Idm-E 374

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 9 1958

DATE	INITIALS	CODE
1/13	Conu	100
		225

Date of Contract July 29, 1952

Date of Certification April 28, 1954

Expiration Date of Royalty Payments July 29, 1962

Total Amount of Contract $39,600.00

Total Expenditures under Contract $6,177.20

Amount of Government Participation at 75 % $4,632.92

Royalty Payments this Period None

Previous Royalty Payments $4,632.92

Total Royalty Payments to Date $4,632.92

Precent Government Participation Repaid 100%

Royalty Due on Production to Date None

Royalty Remarks

	Tons	Analysis
Original Estimate of DMEA Reserves (Field Team Final Report) Mines [x] Survey [ ] Joint [ ]	166,696	Mn 20.26%
Revised Estimate of DMEA Reserves (Field Team) Mines [x] Survey [ ] Joint [ ]	100,000	7% recoverable Mn.
Increase of Reserves by work performed subsequent to DMEA project work	None	
Production DMEA ore (This period)	None	
(Previous)	about 18,000	7% recoverable
(To date)	" 18,000	" "
" Operator's ore found subsequent to DMEA work (This period)	None	
(Previous)	"	
(To date)	"	

Percent Revised Reserves mined 18

(For Uranium Ores Only)

Initial Production Bonus:

Status of Operator: Ineligible [ ] Applied for [ ] Rec'ing pmt [ ] Pd up [ ]

Pounds U_3O_8 produced this period eligible for Bonus

Amount of Bonus paid to Operator this period $

Total pounds U_3O_8 produced to date eligible for Bonus

Total amount of Bonus paid to Operator to date

Bonus Royalty Paid $

Bonus Royalty Due $

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: The mill was dismantled and moved from the property in the fall of 1954. There has been no subsequent activity.

Signed H. Burmester
Engineer

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 8 1957

DATE	INITIALS	CODE
8	C	220
9	COM	100
	None	

Semi-Annual Reports of Certified Projects

Reporting Period Jan. 1 to June 30, 1957 Date of Examination None

Operator Old Dominion Manganese Company

Mine Name Mineral Ridge Mine

County and State Shenandoah & Frederick Counties, Va.

Docket No. and Commodity ---- DMEA - 2359 (manganese)

Contract No. ---- Idm-E 374

Date of Contract July 29, 1952

Date of Certification April 28, 1954

Expiration Date of Royalty Payments July 29, 1962

Total Amount of Contract #39,600.00

Total Expenditures under Contract $6,177.20

Amount of Government Participation at 75 % $4,632.92

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 3 1957

DATE	INITIALS	CODE

Royalty Payments this Period None

Previous Royalty Payments $4,632.92

Total Royalty Payments to Date $4,632.92

Percent Government Participation Repaid 100

Royalty Due on Production to Date None

Royalty Remarks : No data to add to that contained in the July 1 to December 31, 1956 semi-annual report.

	Tons	Analysis
Original Estimate of DMEA: Reserves (Field Team Final Report) Mines [X] Survey [ ] Joint [ ]	166,696	Mn 20.26%
X Revised Estimate of DMEA Reserves (Field Team) Mines [X] Survey [ ] Joint [ ]	100,000	7% recoverable Mn
Increase of Reserves by work performed subsequent to DMEA project work	None	
Production DMEA ore (This period)	None	
(Previous) About	18,000	7% recoverable
(To date) "	18,000	
" Operator's ore (This period)	None	
found subsequent (Previous)	"	
to DMEA work (To date)	"	

Percent Revised Reserves mined 18

(FOR URANIUM ORES ONLY)

Initial Production Bonus:

Status of Operator: Ineligible ( ) Applied for ( ) Receving Payment ( ) Paid Up ( )

Pounds U_3O_8 produced this period eligible for Bonus
Amount of Bonus paid to Operator this period $
Total pounds U_3O_8 produced to date eligible for Bonus
Total amount of Bonus paid to Operator to date $
Bonus Royalty Paid $ Bonus Royalty Due $

INVESTMENT DATA

Shafts			Winzes			Drifts and Crosscuts		
Size	Feet	Cost	Size	Feet	Cost	Size	Feet	Cost

DRILLING

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

Mine Plant		Facilities Mill		Roads	
Description	Cost	Description	Cost	Description	Cost

Remarks: There has been no known activity on this property since the fall of 1954 when the mill was dismantled and moved off the property.

R. Burmeister

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

FILE COPY
Surname:
DMEA

Chambers
Martin
Selbridge
Matthews
Dwyer

DEC 23 1955

Hon. Herbert Brownell, Jr.
Attorney General
Washington 25, D. C.

My dear Mr. Attorney General:

Receipt is acknowledged of your letter of December 12, 1955, your file reference NEM:VAA 9-1-18-227, advising that the Old Dominion Manganese Company, Inc., Contract No. Idm-E374, Docket No. DMEA-2359, has paid its account in full.

We thank you for this fine service.

Sincerely yours,

Edward J. Fritz

Solicitor

DEPUTY

JLChambers/wb
December 19, 1955

Copy to: Secretary's File
Solicitor's Docket
DMEA Docket
Admr. Reading File, DMEA
Administrator, DMEA
Region V Field Team (2)
Mr. Dwyer
Mr. Martin, DMEA
Mr. Chambers, DMEA

ADDRESS REPLY TO
"THE ATTORNEY GENERAL"
AND REFER TO
INITIALS AND NUMBER

REM:VAA

9-1-18-227

UNITED STATES
DEPARTMENT OF JUSTICE
WASHINGTON 25, D. C.

December 12, 1955

INTERIOR DEPT.
DEC 13 1955
SOLICITOR

RECEIVED
DEC 14 1955

Answer 2359

J. Reuel Armstrong
Solicitor
Department of the Interior
Washington, D. C.

Rcd. emd.
DEC 13 1955

Dear Mr. Armstrong:

There is enclosed one copy each of a letter dated December 2, 1955, from United States Attorney Williams and a letter dated today to Mr. Laurence, concerning the claim against Old Dominion Manganese Company, Inc., under Exploration Project Contract No. Idm-E374, Docket No. DMEA-2359.

Inasmuch as the full amount of the claim appears to have been collected, this Department is closing its file.

Sincerely,

PERRY W. MORTON
Assistant Attorney General
Lands Division

By: Robt E Mulroney
Robt. E. Mulroney
Chief, Trial Section

Enclosure
No. 116249

CLOSING MEMORANDUM TO MR. O'HARA

MRG

9093

js

December 2, 1955 RECEIVED

DEC 14

Perry W. Morton, Esq.
Assistant Attorney General
Lands Division
Department of Justice
Washington 25, D. C.

Re: Claim against Old Dominion Manganese Company, Inc. under Defense Minerals Exploration Administration Contract.
Your ref: REM:VAA 90-1-18-227

Dear Mr. Morton:

I enclose herewith a check for the final payment of $600 in full settlement of our claim against Old Dominion.

Since nothing further remains to be done, I am closing my file in this matter.

Very truly yours,

PAUL W. WILLIAMS
United States Attorney

by: MIRIAM R. GOLDMAN
Assistant U. S. Attorney

Enclosure

ENCLOSURE
No 116249
FROM
Department of Justice

U. S. GOVERNMENT PRINTING OFFICE 16—71087-1

COPY

RRM:VAA

ejb

90-1-18-227

December 12, 1955

RECEIVED
DEC 14 1955

REGISTERED

Mr. Robert A. Laurence
Executive Officer
DMEA Field Team, Region V
Room 13, Post Office Building
Knoxville 2, Tennessee

Dear Mr. Laurence:

Reference is made to the claim against Old Dominion Manganese Company, Inc., under Exploration Project Contract No. Idm-E374, Docket No. DMEA-2359.

There is enclosed check No. 129, dated November 29, 1955, in the amount of $600.00, drawn by Old Dominion Manganese Company, Incorporated, on Massanutten Bank of Strasburg, Strasburg, Virginia.

Sincerely,

PERRY W. MORTON
Assistant Attorney General
Lands Division

By:

Robt. E. Mulroney
Chief, Trial Section

Enclosure
No. 116248

Check for $600.00 enclosed.

TRIPLICATE

STANDARD FORM 201 (Formerly Cert. of Deposit, Form 1)
Promulgated Oct. 1949 by Treasury Dept., Fiscal Service

THIS DEPOSIT IS NOT SUBJECT TO CHECK

Oak Ridge, Tennessee

DEPOSIT NO. 14-23-070-52

For credit of 428 Dr. Tr[redacted]egional Office, Oak Ridge, T[redacted] 12/16/55
(Name, title, and disbursi[redacted]ther identification symbol of accountable officer) (Date sent)

deposited with Hamilton National Bank, Knoxville, Tennessee
(Name and location of depositary)

$ 606.56

for accounts listed below. SCHEDULE NOS.

ACCOUNT SYMBOL	TITLE OF ACCOUNT TO BE CREDITED	AMOUNT
14X4401	Idm-P-374 Old Dominion Manganese (Royalty) Idm-P-712 Rock Mining Company (Royalty)	600.00 6.56

(Depositor will insert below his name, title, Department or Agency concerned, and his address)

Defense Minerals Exploration Administration
Bureau of Mines, Dept. of Interior
Helen R. Miller, Adm. Asst.
P. O. Box 217
Norris, Tennessee

SPACE BELOW TO BE USED BY DEPOSITARY ONLY

I certify that the above amount has been received for credit in the account of the Treasurer of the United States on the date shown, subject to adjustment for uncollectible items included therein.

(Authorized signature)

(Date of credit in Treasurer's account)

DEPOSITARY WILL DATE, SIGN, AND RETURN THIS TO DEPOSITOR FOR HIS RETAINED COPY

16—59686b-1 GPO

Oak Ridge, Tennessee

THIS DEPOSIT IS NOT SUBJECT TO CHECK

DEPOSIT NO.
14-23-070-38

For credit of 428 BR TRSY Regional Office, Oak Ridge, Tennessee 11/2/55
(Name, title, and disbursing or other identification symbol of accountable officer) (Date sent)

deposited with Hamilton National Bank, Knoxville, Tennessee
(Name and location of depositary)

$ 1,551.57

for accounts listed below. SCHEDULE NOS.

ACCOUNT SYMBOL	TITLE OF ACCOUNT TO BE CREDITED	AMOUNT
14X4401	Idm-E-374 Old Dominion Manganese (Royalty)	1,532.92
	Idm-E-776 S. D. McKinney (Royalty)	18.65
		1,551.57

(Depositor will insert below his name, title, Department or Agency concerned, and his address)

Defense Minerals Exploration Administration
Bureau of Mines, Department of Interior
Helen R. Miller, Administrative Assistant
P. O. Box 217
Norris, Tennessee

SPACE BELOW TO BE USED BY DEPOSITARY ONLY

I certify that the above amount has been received for credit in the account of the Treasurer of the United States on the date shown, subject to adjustment for uncollectible items included therein.

(Authorized signature)

(Date of credit in Treasurer's account)

DEPOSITARY WILL DATE, SIGN, AND RETURN THIS TO DEPOSITOR FOR HIS RETAINED COPY

16—59686b-1 GPO

TRIPLICATE

STANDARD FORM 201 (Formerly Cert. of Deposit, Form 1)
Promulgated Oct. 1949 by Treasury Dept., Fiscal Service

ADDRESS REPLY TO
"THE ATTORNEY GENERAL"
AND REFER TO
INITIALS AND NUMBER

REM:VAA

90-1-18-227

Noted Nov 1955

UNITED STATES
DEPARTMENT OF JUSTICE
WASHINGTON 25, D. C.

October 25, 1955

INTERIOR DEPT.
OCT 26 1955
SOLICITOR

RECEIVED
OCT 31 1955

J. Reuel Armstrong, Esquire
Solicitor
Department of the Interior
Washington, D. C.

Dear Mr. Armstrong:

There is enclosed one copy each of a letter dated October 12, 1955, from United States Attorney Williams and a letter dated today to Mr. Laurence, concerning the claim against Old Dominion Manganese Company, Inc., under Exploration Project Contract No. Idm-E374, Docket No. DMEA-2359. (Your reference: Defense Minerals Exploration Administration.)

Sincerely,

PERRY W. MORTON
Assistant Attorney General
Lands Division

By: Robt E. Mulroney
Robt. E. Mulroney
Chief, Trial Section

Enclosure
No. 107756

RECEIVED
OCT 26 1955
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

MRG

1641

js

RECEIVED
OCT 31 1955

October 12, 1955

Perry W. Morton, Esq.
Assistant Attorney General
Lands Division
Department of Justice
Washington 25, D. C.

Re: Claim against Old Dominion Manganese Company, Inc. under defense Minerals Exploration Administration Contract.
Your ref: REM:VAA90 -1-18-227

Dear Mr. Morton:

I enclose herewith a check for $1,532.92, the third installment under the payment arrangement which you approved in your letter of August 26, 1955. You will note that this check is $600 short of the full payment contemplated. The attorney for Old Dominion has requested that we wait until November 1 of this year for the additional $600.

Very truly yours,

PAUL W. WILLIAMS
United States Attorney

by _____
MIRIAM R. GOLDMAN
Assistant U.S. Attorney

Encl. Check # S-14
dated October 7, 1955

ENCLOSURE
No 107756
FROM
Department of Justice

U. S. GOVERNMENT PRINTING OFFICE 16—71087-1

RHM:VAA

cjb

90-1-18-227

October 25, 1955

REGISTERED

Mr. Robert A. Laurence
Executive Officer
DMEA Field Team, Region V
Room 13, Post Office Building
Knoxville 2, Tennessee

Dear Mr. Laurence:

Reference is made to the claim against Old Dominion Manganese Company, Inc., under Exploration Project Contract No. Idm-E374, Docket No. DMEA-2359.

There is enclosed certified check No. S-14, dated October 7, 1955, in the amount of $1,532.92, drawn on Empire Trust Company, New York, New York, payable to the Treasurer of the United States, drawn by Old Dominion Manganese Company, Inc.

Sincerely,

PERRY W. MORTON
Assistant Attorney General
Lands Division

By:
Robt. E. Mulroney
Chief, Trial Section

Enclosure
No. 107755

Check for $1,532.92 enclosed.

Oak Ridge, Tennessee

THIS DEPOSIT IS NOT SUBJECT TO CHECK

DEPOSIT NO. 14-23-070-30

For credit of 428 BR TRSY Regional Office, Oak Ridge, Tennessee 10/3/55
(Name, title, and disbursing or other identification symbol of accountable officer) (Date sent)

deposited with Hamilton National Bank, Knoxville, Tennessee
(Name and location of depositary)

$ 1,224.54

for accounts listed below. SCHEDULE NOS.

ACCOUNT SYMBOL	TITLE OF ACCOUNT TO BE CREDITED	AMOUNT
14X4401	Idm-E694 W. B. Chrisawn (Royalty Payment)	1.72
	Idm-E762 Keller Mining (Royalty Payment)	82.98
	Idm-E374 Old Dominion (Royalty Payment)	1,000.00
	Idm-E757 Phillips, Huskins, Phillips (R.P.)	13.06
	Idm-E757 Phillips, Huskins, Phillips (R.P.)	18.21
	Idm-E410 Elk Mining Company (Royalty Payment)	108.57

(Depositor will insert below his name, title, Department or Agency concerned, and his address)

Defense Minerals Exploration Administration
Bureau of Mines, Department of Interior
Helen R. Miller, Adm. Asst.
P. O. Box 217
Norris, Tennessee

SPACE BELOW TO BE USED BY DEPOSITARY ONLY

I certify that the above amount has been received for credit in the account of the Treasurer of the United States on the date shown, subject to adjustment for uncollectible items included therein.

(Authorized signature)

OCT 3 1955

(Date of credit in Treasurer's account)

DEPOSITARY WILL DATE, SIGN, AND RETURN THIS TO DEPOSITOR FOR HIS RETAINED COPY

16—59686b-1 GPO

TRIPLICATE

STANDARD FORM 201 (Formerly Cert. of Deposit, Form 1)
Promulgated Oct. 1949 by Treasury Dept., Fiscal Service

400

RECEIVED
SEP 28 1955

September 27, 1955

Memorandum

To: Helen Miller, Ass't Administrative Officer, Region V

From: Acting Executive Officer, DMEA - Region V

Copy retained 400

Subject; Royalty checks on DMEA Projects - Region V

Transmitted are bills-of-sale and royalty checks on the following:

400

Idm-K37h, DMEA-2359, Old Dominion Manganese Company, Inc., check forwarded from the Department of Justice No. 127, in the amount of $1,000.

Idm-E757, DMEA-3559, Phillips, Huskins & Huskins, Spruce Pine, N. C., sales in the amount of $261.19, and a check No. 101 in the amount of $13.06 representing 5% royalty.

Idm-E757, DMEA-3559, Phillips, Huskins & Huskins, Spruce Pine, N. C., sale of scrap mica in the amount of $364.12, and a check No. 106 in the amount of $18.21 representing 5% royalty.

V. J. Lynch

ZM.
cc:
Lynch
Shirley
Laurence
Mittendorf

$1,000

Royalty

ADDRESS REPLY TO
"THE ATTORNEY GENERAL"
AND REFER TO
INITIALS AND NUMBER

REM:VAA

90-1-18-227

INTERIOR DEPT.

SEP 21 1955

SOLICITOR

UNITED STATES
DEPARTMENT OF JUSTICE
WASHINGTON 25, D. C.

September 20, 1955

J. Reuel Armstrong, Esquire
Solicitor
Department of the Interior
Washington, D. C.

Dear Mr. Armstrong:

There is enclosed one copy each of a letter dated September 12, 1955, from United States Attorney Williams and a letter dated today to Mr. Laurence, concerning the claim against Old Dominion Manganese Company, Inc., under Exploration Project Contract No. Idm-E374, Docket No. DMEA-2359. (Your reference: Defense Minerals Exploration Administration.)

Sincerely,

PERRY W. MORTON
Assistant Attorney General
Lands Division

By: Robt. E. Mulroney
Robt. E. Mulroney
Chief, Trial Section

Enclosure
No. 22479

RECEIVED

SEP 21 1955

GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

mx

MRG

9093

September 12, 1955

Perry W. Morton, Esq.
Assistant Attorney General
Lands Division
Department of Justice
Washington 25, D. C.

Re: Claim against Old Dominion Manganese Company, Inc. under Defense Minerals Exploration Administration Contract
(Your ref: REM:VAA 90-1-18-227)

Dear Mr. Morton:

I enclose herewith a $1000. check, the second installment under the payment arrangement which you approved in your letter of August 26, 1955, in accordance with your instructions.

I have advised the company of your approval, and the final installment will be made payable to the Defense Minerals Exploration Administration.

Very truly yours,

PAUL W. WILLIAMS
United States Attorney

by _____
Miriam R. Goldman
Assistant U. S. Attorney

Enc.-Ck. #127
dated Aug. 31, 1955

INCLOSURE
No 22479
FROM
Department of Justice
7—849
U. S. GOVERNMENT PRINTING OFFICE

[redacted]:VAA

90-1-18-287

September 20, 1955

[redacted]

Mr. Robert A. Lawrence
Executive Officer
DMEA Field Team, Region V
Room 13, Post Office Building
Knoxville 2, Tennessee

Dear Mr. Lawrence:

Reference is made to the claim against Old Dominion Manganese Company, Inc., under Exploration Project Contract No. DMA-2374, Docket No. DMA-2359.

There is enclosed certified check No. 127, dated August 31, 1955, in the amount of $1,000.00, drawn on Massanutten Bank of Strasburg, Strasburg, Virginia, payable to the Treasurer of the United States, drawn by Old Dominion Manganese Company, Inc.

Sincerely,

PERRY W. MORTON
Assistant Attorney General
Lands Division

By:

Robt. E. Mulroney
Chief, Trial Section

Enclosure
No. 22478

Check for $1,000.00 enclosed.

TRIPLICATE

STANDARD FORM 201 (Formerly Cert. of Deposit, Form 1)
Promulgated Oct. 1949 by Treasury Dept., Fiscal Service

THIS DEPOSIT IS NOT SUBJECT TO CHECK

Oak Ridge, Tennessee

DEPOSIT NO. 14-03-070-26

For credit of 128 BR TRSY Lepic[illegible] Office, Oak Ridge, Tennessee 9/7/55
(Name, title, and disbursing or other identification symbol of accountable officer) (Date sent)

deposited with Hamilton National Bank, Knoxville, Tennessee
(Name and location of depositary)

$ 1500.00

for accounts listed below. SCHEDULE NOS.

ACCOUNT SYMBOL	TITLE OF ACCOUNT TO BE CREDITED	AMOUNT
14X4401	Idm-E-374 Old Dominion Manganese Company (Royalty Payment)	1500.00

(Depositor will insert below his name, title, Department or Agency concerned, and his address)

Defense Minerals Exploration Administration
Department of Interior, Bureau of Mines
Helen R. Miller, Adm. Asst.
P. O. Box 217
Norris, Tennessee

SPACE BELOW TO BE USED BY DEPOSITARY ONLY

I certify that the above amount has been received for credit in the account of the Treasurer of the United States on the date shown, subject to adjustment for uncollectible items included therein.

(Authorized signature)

(Date of credit in Treasurer's account)

DEPOSITARY WILL DATE, SIGN, AND RETURN THIS TO DEPOSITOR FOR HIS RETAINED COPY

16—59686b-1 GPO

ADDRESS REPLY TO
"THE ATTORNEY GENERAL"
AND REFER TO
INITIALS AND NUMBER

REM:VAA

90-1-18-227

INTERIOR DEPT.

AUG 29 1955

SOLICITOR

UNITED STATES
DEPARTMENT OF JUSTICE
WASHINGTON 25, D. C.

August 26, 1955

RECEIVED
SEP - 1 1955

J. Reuel Armstrong, Esquire
Solicitor
Department of the Interior
Washington, D. C.

Dear Mr. Armstrong:

Receipt is acknowledged of Mr. Fritz' letter dated August 2, 1955, concerning the claim against Old Dominion Manganese Company, Inc., under Exploration Project Contract No. Idm-E374, Docket No. DMEA-2359. (Your reference: Defense Minerals Exploration Administration.)

This Department has considered the settlement proposed by the company, and is in agreement with the Department of the Interior that the settlement is satisfactory. The United States Attorney at New York has been so advised and has been asked to inform the company to this effect. The $1500.00 check already received from the company has been forwarded to Mr. Laurence, in accordance with the request contained in Mr. Fritz' letter.

Sincerely,

PERRY W. MORTON
Assistant Attorney General
Lands Division

By: Robt E Mulroney
Robt. E. Mulroney
Chief, Trial Section

RECEIVED
AUG 29 1955
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

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

400

RECEIVED
SEP - 8 1955

Royalty

September 6, 1955

Memorandum

To: Helen Miller, Ass't Administrative Officer, Region V

From: Executive Officer, DMEA - Region V - Knoxville, Tenn.

Subject: Royalty payment - Idm-E374, DMEA-2359, Old Dominion Manganese Company, Inc. Virginia

Transmitted is a check in the amount of $1,500 (certified-No. 124) dated June 28, 1955, forwarded to this office from the Department of Justice, August 26, 1955, letter of transmittal attached hereto.

Please credit to the above subject contract.

Robert A. Laurence

ZM.
cc:
Lynch
Laurence
Mittendorf
Miller
Wilsman

DMEA Docket

Talbert
Martin
Johnson
Rothendorf

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

AUG 2 1955

N.S. in R.R.

My dear Mr. Attorney General:

Receipt is acknowledged of your letter dated July 21, 1955, reference REM-VAA 90-1-18-227, concerning this Department's claim against the Old Dominion Manganese Company, Inc., under Exploration Project Contract No. Idm-E374, Docket No. DMEA-2359.

You are advised that the settlement proposed by the Company is satisfactory to this Department. The checks submitted in accordance with this proposal should be made payable to the Defense Minerals Exploration Administration and forwarded to Robert A. Laurence, Executive Officer, DMEA Field Team, Region V, Room 13, Post Office Building, Knoxville, Tennessee, for deposit to "14X4401(01) Revolving Fund, Defense Production Act, Interior (Allocated Working Fund to the Office of the Secretary)".

Sincerely yours,

Edmund T. Fritz
ACTING Solicitor

Hon. Herbert Brownell, Jr.
Attorney General
Washington 25, D. C.

EDTalbert/ama
July 27, 1955

Copy to: Secretary's File
Solicitor's Docket
DMEA Docket
Admr. Reading File, DMEA
Administrator, DMEA
Region V Field Team (2)
Mr. Hofflund
Mr. Martin, DMEA
Mr. Chambers, DMEA

ADDRESS REPLY TO
"THE ATTORNEY GENERAL"
AND REFER TO
INITIALS AND NUMBER

REM - VAA

90-1-18-227

UNITED STATES
DEPARTMENT OF JUSTICE
WASHINGTON 25, D. C.

July 21, 1955

INTERIOR DEPT.
JUL 22 1955
SOLICITOR

DMEA-2354

J. Reuel Armstrong, Esquire
Solicitor
Department of the Interior
Washington, D. C.

Dear Mr. Armstrong:

There is enclosed one copy each of a letter dated July 11, 1955, from the United States Attorney at New York and letters dated June 29, 1955, June 30, 1955, and July 11, 1955, from Craigh Leonard, all concerning a claim against Old Dominion Manganese Company, Inc. (Your reference: Defense Minerals Exploration Administration.)

Please advise this Department whether or not the debtor company's proposal is satisfactory to you. If it is, please detail the account to which the $1,500.00 check is to be deposited.

Sincerely,

PERRY W. MORTON
Assistant Attorney General
Lands Division

By: Robt E. Mulroney
Robt. E. Mulroney
Chief, Trial Section

Enclosure
No. 99854

RECEIVED
JUL 22 1955
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

MRG

9093

INCLOSURE
No 99854

FROM
Department of Justice

7—849

U. S. GOVERNMENT PRINTING OFFICE

mbb-c

July 11, 1955

Perry W. Morton, Esq.,
Assistant Attorney General
Lands Division
Department of Justice
Washington 25, D. C.

Re: Claim against Old Dominion
Manganese Co., Inc. under
Defense Minerals Exploration
Administration Contract
Your ref: REM:VAA:90-1-18-227

Dear Mr. Morton:

I enclose herewith copies of 3 self-explanatory letters from Mr. Craigh Leonard, Attorney for the Old Dominion Manganese Co., Inc., and a certified check for $1500.00. These letters embody a tentative arrangement for the payment of the Government's claim against Old Dominion Manganese Co. Inc., which I have agreed to subject to your approval.

As you will note, the enclosed $1500.00 check constitutes the first of three installment payments in full satisfaction of our claim. In view of the fact that the subject company is at present unwilling to confess judgment lest it prejudice the new financing which it contemplates, I do not think that the Government's position will be injured by refraining from instituting suit before October 1, 1955.

On the other hand, by withholding the institution of suit until October 1, 1955, the Government may recover the full amount of its claim without resorting to litigation. If you approve this installment arrangement, please forward the check to the appropriate office.

Very truly yours,

J. EDWARD LUMBARD
United States Attorney

By: MIRIAM R. GOLDMAN
Assistant United States Attorney

Enclosures

LAW OFFICES OF
LEBOEUF, LAMB & LEIBY
15 BROAD STREET
NEW YORK 5, N.Y.

RANDALL J. LEBOEUF, JR.
HORACE R. LAMB
ADRIAN C. LEIBY
CHAUNCEY P. WILLIAMS, JR.
JOHN A. BROUGH
CRAIGH LEONARD
JAMES O'MALLEY, JR.
JOHN L. GROSE
HOMER CRAWFORD

1826 JEFFERSON PLACE, N.W.
WASHINGTON 6, D.C.

June 29, 1955

J. Edward Lumbard, Esq.
United States Attorney
U. S. Court House
Foley Square
New York, N. Y.

Attention: Miss Miriam R. Goldman

Dear Miss Goldman:

This letter will summarize the proposals made at our conference yesterday by Mr. John B. Lewis and me with respect to the claim of the United States Government against Old Dominion Manganese Company arising out of a manganese discovery financed in part by a D.M.E.A. loan. The claim is in the amount of $4,633. and Old Dominion Manganese Company disputes neither the validity of the claim nor the amount. It would, however, appreciate additional time in which to pay the claim.

As I told you yesterday, operations at the company have been suspended due to lack of working capital and a dispute between certain stockholders. Negotiations are under way to obtain additional financing which probably will evolve in a public offering of securities. The proposal now pending contemplates the immediate payment of all the company's obligations and would also provide for sufficient working capital to resume operations.

At the present time the only outstanding obligations that the management is aware of are the government's claim under the D.M.E.A. contract, compensation voted, but unpaid, to the President of the company, unpaid legal fees, and a debt to stockholders in Philadelphia. All the other claims seem to me clearly subordinate to the government's claim under the D.M.E.A. contract.

The company proposes to pay the government's claim by a down payment of $1,500., deliverable as soon as a certified check can be obtained from its bank in Strasburg, Virginia, an additional payment of $1,000. on September 1, 1955 and the balance on October 1, 1955. The company's cash position and receivables is such that these payments can be made according to schedule and the company does not plan, until new financing can be obtained, to disburse any other cash except interest in the amount of approximately $800 to the holder of the mortgage on the company's properties.

If this proposal is acceptable to the government, I will undertake to advise you immediately in the event that any suit is threatened or brought by any other creditor of the company during the period in which the scheduled payments are to be made.

Very truly yours,

CL/rh

CRAIGH LEONARD

LAW OFFICES OF
LEBOEUF, LAMB & LEIBY
15 BROAD STREET
NEW YORK 5, N.Y.

RANDALL J. LEBOEUF, JR.
HORACE R. LAMB
ADRIAN C. LEIBY
CHAUNCEY P. WILLIAMS, JR.
JOHN A. BROUGH
CRAIGH LEONARD
JAMES O'MALLEY, JR.
JOHN L. GROSE
HOMER CRAWFORD

1826 JEFFERSON PLACE, N.W.
WASHINGTON 6, D.C.

June 30, 1955

J. Edward Lumbard, Esq.
United States Attorney
U. S. Court House
New York, N. Y.

Attention: Miss Miriam R. Goldman

Dear Miss Goldman:

Pursuant to my letter of yesterday, I enclose herewith certified check of Old Dominion Manganese Company payable to the Treasurer of the United States in the amount of $1,500., which represents the first installment of the payment of the government's claim against the company under its D.M.E.A. contract.

I understand that if the check is accepted and cashed it will be an indication that the government has accepted the proposal for payment as outlined in my letter.

Very truly yours,

CL/rh
Enclosure

CRAIGH LEONARD

LAW OFFICES OF
LEBOEUF, LAMB & LEIBY
15 BROAD STREET
NEW YORK 5, N.Y.

RANDALL J. LeBOEUF, JR.
HORACE R. LAMB
ADRIAN C. LEIBY
CHAUNCEY P. WILLIAMS, JR.
JOHN A. BROUGH
CRAIGH LEONARD
JAMES J. MALLEY, JR.
JOHN L. GROSE
HOMER CRAWFORD

1826 JEFFERSON PLACE, N.W.
WASHINGTON 6, D. C.

July 11, 1955

J. Edward Lumbard, Esq.
United States Attorney
U. S. Court House
New York, N. Y.

Attention: Miss Miriam P. Goldman

Dear Miss Goldman:

In further confirmation of our understanding reached at our conference in your office with Mr. John B. Lewis on June 28, 1955 regarding the Government's claim against Old Dominion Manganese Company under a D.M.E.A. contract, I advise you that in the event any legal action is threatened against the Company by other creditors the Company will confess judgment to the United States in the amount of the then unpaid balance of the claim.

Very truly yours,

CL/rh

CRAIGH LEONARD

ADDRESS REPLY TO
"THE ATTORNEY GENERAL"
AND REFER TO
INITIALS AND NUMBER

REM: VAA

~~90-1-18-227~~

INTERIOR DEPT.
APR 29 1955
SOLICITOR
DMEA 2359

UNITED STATES
DEPARTMENT OF JUSTICE
WASHINGTON 25, D. C.

April 27, 1955

RECEIVED
APR 29 1955
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

E 2724

J. Reuel Armstrong, Esquire
Solicitor
Department of the Interior
Washington, D.C.

Dear Mr. Armstrong:

Reference is made to your letter dated April 12, 1955, concerning a claim against Old Dominion Manganese Company, Inc. (Your reference: Defense Minerals Exploration Administration.)

The United States Attorney at New York, New York, has been requested to write a registered letter return receipt requested, demanding payment of the debt of $4,632.92. He was advised that if payment was not promptly forthcoming, suit should be commenced.

You will be kept informed of all developments.

Sincerely,

PERRY W. MORTON
Assistant Attorney General
Lands Division

By: Robt E. Mulroney
Robt. E. Mulroney
Chief, Trial Section

DMEA
FILE COPY
Surname:

Chamlin
Martin
Jackson
Holland
Dunger

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

APR 12 1955

My dear Mr. Attorney General:

There is submitted for appropriate action the case of the Old Dominion Manganese Company, Inc. (Delaware), Room 2100, 52 Wall Street, New York 5, New York, John B. Lewis, President, a party to a minerals exploration contract with the Defense Minerals Exploration Administration of this Department, under Exploration Project Contract Idm-E374, Docket No. DMEA-2359.

In general, the contract provides that the Old Dominion Manganese Company, Inc., (hereinafter referred to as the Company) carry out an exploration project for manganese as outlined in Exhibit "A", which is a part of the contract, and that the Government will reimburse the Company for 75 percent of the accepted cost of the exploration work accomplished.

The contract further provides that if the Government issues a "Certification of Discovery or Development Under an Exploration Contract", the Company shall pay a royalty on any production of ore from the land described in the contract at rates specified until the amount of cost contributed by the Government is fully repaid or for a period of 10 years from the date of the contract, whichever occurs first. Such a certificate was issued on April 28, 1954, by the Administrator of the Defense Minerals Exploration Administration.

While the contract was made for a possible total cost of $39,600.00, the Company and the Administration mutually agreed to terminate the contract after exploration work in the amount of $6,177.22 had been done. The Government reimbursed the Company 75 percent of the total accepted cost, or $4,632.92. The latter figure is the amount the Company owes the Government. The Company acknowledged this obligation in a letter dated July 1, 1954, to the Executive Officer of Region VIII, the last paragraph of which reads as follows: "At the time that we were advised of the certification of discovery on April 28, 1953, a sufficient amount had accrued from shipments to cover the amount due the Government in royalty payments in event of a discovery certification. It was not therefore deemed necessary to advise the purchaser to make royalty deductions." (The date of certification should have been April 28, 1954.)

APR 11 1955

The Administrator and the Executive Officer of Region VIII of DMEA have written a number of letters to the Company management requesting settlement of its account. Copies of some of these letters and the Company's replies are submitted as Enclosures Nos. 3 to 8.

The Department has photostatic copies of settlement invoices from the General Services Administration, purchaser of manganese for the Government, which show that the Company marketed more manganese ore than is necessary to pay its $4,632.92 royalty obligation to the Government. It is not thought necessary, however, to submit these invoices at this time because the Company has admitted its obligation to the Government as cited above. The Department will be glad, however, to forward these documents if they should be required by you in the collection of this account.

The following Enclosures are attached as additional information:

Enclosure No. 1. The Contract, including Exhibit "A", thereof.

Enclosure No. 2. "Certification by the United States of America of a Discovery or Development Under an Exploration Project Contract", signed by C. O. Mittendorf, Administrator, DMEA, under date of April 28, 1954, and letter of transmittal dated April 29, 1954, also signed by C. O. Mittendorf.

Enclosure No. 3. Letter from Robert C. Stephenson, Manager, Old Dominion Manganese Co., Inc., under date of July 1, 1954, to W. T. Millar, DMEA Executive Officer, Region VIII, who at the time had charge of the project.

Enclosure No. 4. Letter from W. T. Millar, DMEA Executive Officer, Region VIII, under date of June 23, 1954, to John B. Lewis, President of the Company, calling attention to C. O. Mittendorf's letter of April 29, 1954, requesting that royalty payments be made.

Enclosure No. 5. Letter from C. O. Mittendorf, Administrator, under date of November 17, 1954, to John B. Lewis, President of the Company, requesting an acceptable proposal for liquidating the Company's royalty obligation.

Enclosure No. 6. Letter from John B. Lewis, under date of November 18, 1954, replying to C. O. Mittendorf's letter of November 17, 1954.

Enclosure No. 7. Another letter from John B. Lewis, under date of December 29, 1954, re payment of Company's account.

Enclosure No. 8. Letter from C. O. Mittendorf, Administrator, under date of January 7, 1955, to John B. Lewis, President of the Company, advising that the account will be turned over to the Attorney General for appropriate action if payment is not made by February 28, 1955.

Robert A. Laurence, Executive Officer of Region V, now in charge of this account, whose address is Room 13, Post Office Bldg., Knoxville 2, Tennessee, has been instructed to give your District Attorney any assistance on this case he may need.

Sincerely yours,

J Reuel Armstrong

Solicitor

Hon. Herbert Brownell, Jr.
Attorney General
Washington 25, D. C.

Enclosures

JLChambers/wb
March 18, 1955

Copy to: Secretary's File
Solicitor's Docket
DMEA Docket
Admr. Reading File, DMEA
Administrator, DMEA
Region V Field Team (2)
Mr. Hefflund
Mr. Martin, DMEA
Mr. Chambers, DMEA

Mr. Lewis phoned at 3:50, March 31, 1955, to advise that he will be in Washington on April 6 and hopes to have a check with him then. He has verbal agreement about his financing but it is contingent on his obtaining certain additional leases near the property.

(Dictated by Mr. Martin)
wb

400

C O P Y

2359

WESTERN UNION

WP058 DL PD-CD NEW YORK NY 6 322PME

W S MARTIN, CHIEF IRON DIV.

DMEA DEPT. OF INTERIOR

MEETING SCHEDULED IN WASHINGTON TODAY TO CLOSE LEASES POSTPONED DUE TO DELAY IN PRINCIPAL'S RETURN FROM WEST INDIES WILL ADVISE SOON AS TIME IS DETERMINED HOPE WILL BE THIS WEEK.

J B LEWIS OLD DOMINION MANGANESE CO.

OLD DOMINION MANGANESE COMPANY
INCORPORATED
STAR TANNERY, VIRGINIA

Docket
MAR 23 1955

PLEASE REPLY TO:
2701 ROOM ~~2000~~ 52 WALL STREET
NEW YORK 5, N. Y.
TEL: DIGBY 4-3644

March 22, 1955

WSM

Mr. C. O. Mittendorf, Administrator
United States Department of the Interior
Defense Minerals Exploration Administration
Washington 25, D. C.

Re: Docket No. DMEA 2359 - Manganese
Mineral Ridge mine
Shenandoah and Frederick Counties,
Virginia
Contract No. Idm-E374

Dear Mr. Mittendorf:

Reference is made to your letter of January 7, 1955 and my subsequent informal telephone calls to your Iron and Ferro Alloy division relating to the above Exploration Project Contract.

The plans for reorganization of our company have now been verbally agreed upon with all but two of the principals. Meetings are scheduled for tomorrow with one and early next week with the other. It is expected that funds will be available to pay presently outstanding obligations by the end of this month and to resume expanded operations of our properties within a short time thereafter.

This means that we should be able to send a check in payment of the subject royalty by the middle of next week.

Sincerely yours,

John B. Lewis

President

JBL:s

Old Dominion Manganese Co., Inc., shipped 12 cars of concentrates to GSA in addition to those shown on the "Summary Record of Manganese Shipments" submitted by the Operator. The weight certificate for the last car shipped is dated October 29, 1954. However the acceptance and invoice was not sent to the Operator for his signature until November 12, 1954, so he received payment sometime subsequent to this date.

JWR

March 21, 1955

H.L. Burmeister, Bureau of Mines, College Park, called regarding status of Contract Idm-E 374. Was advised that audit preparing letter

JWR

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

400

Docket
Martin

March 21, 1955

MEMORANDUM

To: The Administrator, DMEA
Through: Mr. Jay L. Chambers

From: Iron and Ferro-Alloys Division, DMEA

Subject: Payment of royalty
Docket No. DMEA 2359 - Manganese
Old Dominion Manganese Co., Inc.
Mineral Ridge mine
Shenandoah and Frederick Counties, Virginia
Contract No. Idm-E374

John B. Lewis telephoned from New York City (where his number is Digby 4-3644) today to advise that he plans to write to you on March 22 with regard to payment of the subject company's royalty indebtedness.

He will outline the financing arrangements which he expects to complete and which he believes will enable him to pay the total royalty indebtedness before the end of March.

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

cc: Mr. J. L. Chambers
Docket
Adm. Read. File
Code 400

WSMartin/ls
3/21/55

Docket copy
Surname:
Talbert
Martin
Hofflund
Johnson

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

INTERIOR DEPT.
JAN - 6 1955
SOLICITOR

JAN - 7 1955

#8

Mr. John B. Lewis, President
Old Dominion Manganese Co., Inc.
Room 2701, 52 Wall Street
New York 5, New York

Re: Docket No. DMEA-2359 (Manganese)
Mineral Ridge Mine
Shenandoah and Frederick
Counties, Virginia
Contract No. Idm-E374

Dear Mr. Lewis:

This will acknowledge receipt of your letter of December 29, 1954, regarding payment of royalties due the Government in the aggregate amount of $4,632.92 under the referenced Exploration Project Contract.

It must be realized that it is not within the authority of this Administration to postpone indefinitely such action as may be necessary to collect the amount of percentage royalties due the Government. Accordingly, I must state that unless an acceptable proposal for the liquidation of this obligation is received by February 28, 1955, it will be necessary to refer the matter to the Attorney General of the United States for appropriate action.

Sincerely yours,

C. O. Mittendorf

Administrator

EDTalbert/wb
January 5, 1955

Copy to: Docket
Admr. Reading File
Field Team, Reg. VIII (2)
T. Kiilsgaard, USGS
G. DeHull, USBM
J. L. Hofflund
J. L. Chambers
W. S. Martin

R.C.H.

OLD DOMINION MANGANESE COMPANY
INCORPORATED
STAR TANNERY, VIRGINIA

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 31 1954
Docket

2701 PLEASE REPLY TO:
ROOM 2000, 52 WALL STREET
NEW YORK 5, N. Y.
TEL: DIGBY 4-3644

December 29, 1954

WSM

Mr. C. O. Mittendorf, Administrator
United States Department of the Interior
Defense Minerals Exploration Administration
Washington 25, D. C.

Re: Docket No. DMEA 2359 - Manganese
Mineral Ridge mine
Shenandoah and Frederick Counties,
Virginia
Contract No. Idm-E374

Dear Mr. Mittendorf:

Referring to our correspondence of last month, the proposing group did not carry out their part of the agreement and no engineer's report was made. I therefore resumed negotiations with the other groups and expect a favorable response next week.

Because of this unforseen delay, it now appears that we would very likely not be able to pay presently outstanding obligations, including the royalties due the Government, before February 1955, and I must request your continued patience.

You will be advised as soon as an agreement has been reached.

Sincerely yours,

John B. Lewis

President

JBL:s

DOCKET
Surname:
Rutledge
Talbert

NOV 22 1954

Mr. John B. Lewis, President
Old Dominion Manganese Co., Inc.
Room 2701, 52 Wall Street
New York 5, New York

Re: Docket No. DMEA 2359-Manganese
Mineral Ridge mine
Shenandoah and Frederick
Counties, Virginia
Contract No. Idm-E374

Dear Mr. Lewis:

This will acknowledge your letter of November 18, 1954, regarding payment of royalties due the Government under the subject contract on production from the Mineral Ridge mine.

We note that you have accepted a proposal to finance and resume operations of the Mineral Ridge mine, which includes payment of the $4,632.92 in royalties due the Government. This proposal is contingent upon a satisfactory engineer's report, which is scheduled for completion the week ending December 10, 1954.

Please note the amount due is $4,632.92 instead of $4,632.91 as stated in our letter of November 17. We will, therefore, hold this matter in abeyance for a reasonable time pending completion of the refinancing of your operations.

Sincerely yours,

C. O. Mittendorf

Administrator

cc: Docket
PT, Reg. 8
Code 400
Adm. Read. File
G. DeHuff, USBM
T. Killsgaard, USGS

FARutledge/ls
11/22/54

R.C.S.

OLD DOMINION MANGANESE COMPANY
INCORPORATED
STAR TANNERY, VIRGINIA

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 19 1954

PLEASE REPLY TO:
2701 ROOM XXXX, 52 WALL STREET
NEW YORK 5, N. Y.
TEL: DIGBY 4-3644

November 18, 1954

Mr. C. O. Mittendorf
United States Department of the Interior
Defense Minerals Exploration Administration
Washington 25, D. C.

Re: Docket No. DMEA 2359 - Manganese
Mineral Ridge mine
Shenandoah and Frederick Counties,
Virginia
Contract No. Idm-E374

Dear Mr. Mittendorf:

In response to your letter of November 17th, I wish to advise that we have accepted a proposal to finance and resume operations of our Mineral Ridge mine, which includes payment of royalties under the subject contract in the amount of $4,632.91. The proposal is contingent upon a satisfactory engineer's report, which is scheduled for completion the week ended December 10, 1954.

It has taken much more time to work out this financing than I had anticipated, as three other plans had to be considered.

You will be advised as soon as it is known the date when the above payment can be made.

Sincerely yours,

John B. Lewis

President

JBL;s

Docket File

November 18, 1954

MEMORANDUM FOR:

Docket No. DMEA 2359
Old Dominion Manganese Co., Inc.
Mineral Ridge Mine,
Shenandoah and Frederick Counties, Va.
Contract Idm-E374

Mr. Lewis telephoned from New York about 10:30 a.m. today, after receiving Mr. Mittendorf's letter asking what arrangements had been made to pay past-due royalty on above contract.

Mr. Lewis said that one of three proposals which had been pending for the company to obtain financing had been tentatively accepted last week. It would require paying the Government's royalty and some other bills by December 10, but was contingent upon an engineer's report now in process.

Mr. Lewis said this arrangement was not absolutely 100% sure since there was the report contingency, but he felt confident everything will be paid in full before the end of the year.

Mr. Rutledge asked that Mr. Lewis give us this information in writing so we may have it on record in our files. Mr. Lewis agreed to send us such a letter.

LScott
11-18-54

400 DOCKET SURNAME
Rutledge
Chamberlin
Johnson

NOV 17 1954

Mr. John B. Lewis, President
Old Dominion Manganese Co., Inc.
Room 2300, 52 Wall Street
New York 5, New York

Re: Docket No. DMEA 2359 - Manganese
Mineral Ridge mine
Shenandoah and Frederick Counties,
Virginia
Contract No. I(p-827)

Dear Mr. Lewis:

Reference is made to the Government's percentage royalty on all production at the above-named mine from July 29, 1952, until the amount contributed under the subject contract by the Government, $4,632.91, is repaid without interest or ten years from the date of the contract, which ever occurs first. Said royalty is due under a "Certification by the United States of America of a Discovery for Development under an Exploration Project Contract" that was issued April 28, 1953.

Mr. Robert C. Stephenson, Manager, Old Dominion Manganese Company, Inc., by letter of July 1, 1954, advised Mr. W. T. Millar, Executive Officer, DMEA Field Team, Region VIII, that: "At the time we were advised of the certification of discovery on April 28, 1953; (1954?) a sufficient amount had accrued from shipments to cover the amount due the Government in royalty payments in event of a discovery certification." No royalty payments have been made to date but on July 1, 1954, Mr. Stephenson took exception to the Government's certification. This matter was discussed in a conference with the Defense Minerals Exploration Administration and a definite proposal regarding payment of the royalty was tentatively promised by October 25, 1954, on October 14, 1954.

As we have received no further communication from you to date, it would be appreciated if you would give this matter your prompt attention. Unless we receive an acceptable proposal concerning your intentions for paying the Government's percentage royalty, we shall be required to proceed accordingly.

Sincerely yours,

C. O. Mittendorf

Administrator

cc to: FT. REG. VIII
Gilbert DeBuff, USBM
Thomas Ward, USGS

cc to: Docket
Code 400
Adm. Reading File

FARUTLEDGE:FOC
11-16-54

R.C.S.

Mr. Selfridge

College Park, Maryland

November 15, 1954

Mr. Clyde W. Beckner, President
Clyde W. Beckner, Incorporated
Charleston, West Virginia

Subj: Docket DMEA-~~2539~~ 2351 (Manganese)
Old Dominion Manganese Co., Inc.
Mineral Ridge Mine, Shenandoah
& Frederick Counties, Virginia
Contract No. Idm-E374

Dear Mr. Beckner:

For your information, enclosed are copies of a Certification and a letter to the Old Dominion Manganese Company, Inc., Room 2100, 52 Wall Street, New York 5, New York.

The property affected by the Certificate of Discovery or Development is the same property described in the Subordination Agreement which was signed by you on the 29th day of May, 1952.

Very truly yours,

W. T. Millar, Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII

Clyde W. Beckner
Defense Minerals Administration
RECEIVED
NOV 18 1954

Enclosures

WTM:rwa

copies for Mr. Selfridge, Chrm., Oper. Comm. (2)
DMEA Files

Docket

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 14 1954

October 14, 1954

MEMORANDUM FOR THE FILE: Docket No. DMEA 2359 - Manganese
Old Dominion Manganese Co., Inc.
Mineral Ridge Mine
Shenandoah and Frederick Counties,
Virginia

Mr. John B. Lewis, President of Old Dominion Manganese Co., Inc., telephoned to Mr. Martin today from New York City.

Mr. Lewis stated he was working on two plans to endeavor to obtain some financing and by the end of next week should be able to write us with a definite proposal regarding the royalty payments. Mr. Lewis mentioned that Clyde Smith was with one group and Walter A. Rukeyser with the other group interested in the project.

WS Martin
W. S. Martin

W. S. Martin

DOCKET
Surname:
Martin
F E Johnson

SEP 20 1954

Mr. Robert C. Stephenson, Manager
Old Dominion Manganese Co., Inc.
Room 2500 Girard Trust Bldg.
Philadelphia 2, Pennsylvania

Re: Docket No. DMEA 2359 - Manganese
Mineral Ridge mine
Shenandoah & Frederick Counties,
Virginia
Contract No. Idm-E374

Dear Mr. Stephenson:

This will acknowledge receipt of your letter of September 16, 1954, regarding a conference to be arranged for discussion of the subject project.

Tuesday, September 28, at 11:00 a.m. will be a convenient time and I shall be glad to be present with Mr. W. S. Martin, Chief, Iron and Ferro-Alloys Division, if Mr. Mittendorf himself is unable to attend.

Sincerely yours,

Frank E. Johnson

Acting Administrator

cc: Docket
Code 400
Adm. Read. File
FT, Region 8
G. DeHuff, USBM
Thor Kiilsgaard, USGS
Code 800-Mr. Chambers (royalty discussion)
Act. Asst. Sol., Def. Min. (Hofflund) - Rm. 7349
(royalty discussion)

WSMartin/ls
9-20-54

R.C.S.

OLD DOMINION MANGANESE COMPANY
INCORPORATED
STAR TANNERY, VIRGINIA

Received
SEP 17 1954

PLEASE REPLY TO:
ROOM 2500 GIRARD TRUST BLDG.
PHILADELPHIA 2, PA.
LOcust 4-5600

September 16, 1954.

WSM

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

Re: Docket DMEA-2359 (Manganese)
Contract No. Idm-E374

Dear Mr. Mittendorf:

If possible, we would like to arrange for a conference with you on the Mineral Ridge DMEA project on Tuesday, September 28th, at either 11:00 a.m. or 2:00 p.m., if either of these times is convenient with you. From Old Dominion Manganese Co. Inc. will be J. B. Lewis, President; P. J. Bertelson, Vice President, and myself.

Please advise us of the time most convenient to you for us to be at your office.

Very truly yours,

OLD DOMINION MANGANESE CO. INC.

Robert C. Stephenson
Manager

RCS/fm

cc: Mr. J. B. Lewis
Mr. P. J. Bertelson

400

DOCKET
Surname:
Martin
Rutledge
Rotan
Parrish
Chambers

INTERIOR DEPT.
AUG 11 1954
SOLICITOR

AUG 23 1954

Mr. Robert C. Stephenson, Manager
Old Dominion Manganese Co., Inc.
Room 2500 Girard Trust Building
Philadelphia 2, Pennsylvania

Re: Docket No. DMEA 2359 - Manganese
Mineral Ridge mine
Shenandoah and Frederick Counties,
Virginia
Contract No. Idm-E374

Dear Mr. Stephenson:

This will acknowledge receipt of your letter of August 2, 1954, with regard to a conference on royalty due the Government by reason of a Certification of Discovery or Development made under the subject contract. Your two letters of July 1 and your letter of July 23 to Mr. Millar have also been forwarded to us for attention.

FROM SOLICITOR
AUG 20 1954
FOR SIGNATURE

According to your letter of July 1 with attached copies of the settlement sheets, your production was stockpiled for blending purposes, and it is, therefore, impossible to report exactly the quantity of concentrates produced from ore originating on "DMEA ground." However, by comparing the tonnage of ore mined from "DMEA ground" to the tonnage of ore mined from ground excluded from our contract, you can derive a percentage figure that can be applied to the concentrates to ascertain the corresponding interest of DMEA in the related production. In other cases where it is not possible to derive the quantity of concentrates directly, we accept apportionments made on the best information obtainable, and we are willing to do so in this instance.

Your same letter of July 1 mentioned that it was not deemed necessary to advise the purchaser to make royalty deductions because a sufficient amount had accrued from shipments to cover the amount due the Government in royalty payments by April 28, 1953, when the Certification of Discovery was made. We will accept payment direct from Old Dominion Manganese Co., Inc., and will not object that the purchaser was not notified to make the royalty deductions.

With respect to your contention that the subject project should not have been certified because the exploration project did not result in a discovery of economically extractable "ore", Article 9 of the subject contract provides that:

> "If, . . . the Government considers that a discovery or a development from which production may be made has resulted from the exploration work, the Government, . . . may so certify in writing to the operator." (Emphases added.)

You will note that the provision for certification is not confined to "discovery" but includes "development" as well. You will observe further that the provision does not require that production must be made immediately, or at all. Rather, the test for certification is whether the Government "considers" that production "may" be made within ten years from the date of the contract as a result of the discovery or development. In this case, manganese mineralization was exposed and production was made. It can hardly be contended in these circumstances that the Government's certification under the provisions of the contract was improper.

As you will appreciate, it is irrelevant whether the operator makes a profit on such production. We would expect, taking as a group the properties for which certifications of discovery or development have been issued, that in many instances such production would be profitable; in some instances, the production would barely meet the "break even" point; and in a few, either through mismanagement or misfortune, the production would be unprofitable.

We should, of course, be agreeable to a conference here with your representatives in order to clarify any remaining questions about the status of our certification. Please be assured that such a conference will be arranged promptly if you will advise us when it would be most convenient for you.

Sincerely yours,

C. O. Mittendorf

Administrator

cc: Docket
Field Team, Reg. 8
Code 400
Admin. Read. File
Mr. Chambers - Code 800
Operating Committee
Gilbert DeHuff, USBM
E. L. Newcomb, USGS

WSMartin/HCRubin/ls
8-10-54

OLD DOMINION MANGANESE COMPANY

INCORPORATED

STAR TANNERY, VIRGINIA

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 9 1954

August 2, 1954.

PLEASE REPLY TO:
ROOM 2500 GIRARD TRUST BLDG.
PHILADELPHIA 2, PA.
LOcust 4-5600

WSay

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

Re: Docket DMEA-2359 (Manganese)
Contract No. Idm-E374

Dear Mr. Mittendorf:

We have been advised by Mr. W. T. Millar that recent correspondence relative to a Certificate of Discovery on Docket No. DMEA-2359, Contract Idm-E374, has been referred to your offices for further consideration.

Mr. Millar has suggested that we arrange an appointment with you to discuss this matter further. We will await your decision on the matter.

Very truly yours,

OLD DOMINION MANGANESE CO. INC.

Robert C. Stephenson

Robert C. Stephenson
Manager

RCS/fm

cc: Mr. W. T. Millar
Mr. J. B. Lewis

DMEA
File Copy
Surname

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

Rubin
HOFlemal

August 2, 1954

Memorandum

To: Chief, Iron and Ferro-Alloys Division

From: Acting Assistant Solicitor, Defense Minerals

Subject: Old Dominion Manganese Co., Inc., Docket No. DMEA-2359 (Manganese), Contract Idm-E374

We have not surnamed this proposed letter to Mr. Millar for the following reasons:

1. In view of the latest letter from the operator dated July 23, and submitted to us today, suggesting a conference on the question of the certification, you may have a proposal concerning it.

2. With respect to the operator's argument that the project should not have been certified because there was, in its opinion, no discovery or development, it is suggested that the following argument be used. The operator's argument amounts to this: that the exploration project did not result in an actual "discovery of economically extractable ore." The answer to it is that—

Article 9 of the subject contract provides that:

> "If,...the Government <u>considers</u> that a discovery or a development from which production <u>may</u> be made has resulted from the exploration work, the Government,...may so certify in writing to the operator." (Emphasis added.)

You will note that the provision for certification is not confined to "discovery" but includes "development" as well. You will note further that the provision does not require that production must be made immediately, or at all. Rather, the test for certification is whether the Government "considers" that production "may" be made within ten years from the date of the contract as a result of the discovery or development. In this case manganese mineralization was exposed and production was made. It can hardly be contended in these circumstances that the

Government's certification under the provisions of the contract was improper. (Then add your point "(3)".)

3. We do not understand the first point in the letter concerning the amount of royalty due the Government, except that the operator is using a method of averaging which apparently is acceptable to the Government.

J. L. Hofflund

J. L. Hofflund
Acting Assistant Director
Defense Minerals

Attachment

HCRubin:ep

Copy to: Solicitor's Docket
DMEA Docket
Admin. Reading File
Mr. Hofflund
Mr. Rubin
Chron.

DOCKET
Surname:
Martin
Chamlin

Mr. W. T. Millar, Executive Officer
DMEA Field Team, Region VIII
Bureau of Mines, Eastern Experiment Station
College Park, Maryland

INTERIOR DEPT.
JUL 19 1954
SOLICITOR

Re: Docket No. DMEA 2359 - Manganese
Old Dominion Manganese Co., Inc.
Mineral Ridge Mine
Shenandoah & Frederick Counties, Virginia
Contract No. Idm-5374

Dear Mr. Millar:

This will acknowledge receipt of your letter of July 12, 1954, enclosing two letters to you of July 1, 1954, from the subject operator.

We note from the letter to which copies of the settlement sheets are attached that because of stockpiling for blending purposes it was not possible to derive directly the quantity of concentrates produced from ore originating on "DMEA ground." Instead a comparison of the quantity of ore mined from "DMEA ground" versus ore mined from reserved ground gave a percentage figure that could be applied to the concentrates in order to ascertain the percentage interest of DMEA in the related production. We note also that it was not deemed necessary to advise the purchaser to make royalty deductions because a sufficient amount had accrued from shipments to cover the amount due the Government in royalty payments by April 28, 1953, when the certification of discovery was made. In other cases where it is not possible to derive the quantity of concentrates directly, we can and do accept apportionments made on the best information obtainable. Similarly we will in this instance accept payment direct from Old Dominion Manganese Co., Inc., and will not make any objection because the purchaser was not advised to make the royalty deductions.

In the other mentioned letter of July 1, the operator sets forth his reasons for believing that no discovery should have been certified at the company's property. Please reply to the operator on the basis of the following:

(1) According to the subject contract: "ARTICLE 9. Repayment by Operator.--(a) If, at any time, the Government considers that a discovery or a development from which production may* be made has resulted from the exploration work, the Government, at any time not later than 6 months

after the Operator has rendered the required final report and final account, may so certify in writing to the Operator."

This article states further: "In the event of such certification, any minerals mined or produced from the land described in Article 2 within 10 years from the date of this contract, including any mined or produced before the certification, shall be subject to a percentage royalty . . . ."*

* Accordingly, the word "may" can here be understood as meaning "within 10 years from the date of this contract."

(2) The fact that production was made confirms that we were correct in concluding that payment might be made.

(3) It is irrelevant whether the operator makes a profit on such production. We would expect, taking as a group the properties for which certifications of discovery or development have been issued, that in many instances such production would be profitable; in some instances the production would barely meet the "break even" point; and in a few, either through mismanagement or misfortune, the production would be unprofitable.

Sincerely yours,

Chairman, Operating Committee

Approved:

Member, Bureau of Mines

Member, Geological Survey

cc: DOCKET
CODE 400
FT. REG. 8
OPERATING COMMITTEE
G. DEHUFF, USBM
MR. NEWCOMB, USGS

WSMartin/ls
7/16/54

Semi-Annual Reports of Certified Projects

Reporting Period July 1 to Dec. 31, 1956 Date of Examination July 1954

Operator Old Dominion Manganese Co.

Mine Name Mineral Ridge Mine

County and State Shenandoah & Frederick counties, Virginia

Docket No. and Commodity --- DMEA- 2359 (manganese)

Contract No. --- Idm-E 374

RECEIVED JAN 10 1957 D.M.E.A.

Date of Contract July 29, 1952

Date of Certification April 28, 1954

Expiration Date of Royalty Payments July 29, 1962

Total Amount of Contract $39,600.00

Total Expenditures under Contract $6,177.22

Amount of Government Participation at 75 % $4,632.92

Royalty Payments this Period None

Previous Royalty Payments $4,632.92

Total Royalty Payments to Date $4,632.92

Percent Government Participation Repaid 100

Royalty Due on Production to Date None

Royalty Remarks: By July 1954 there had been produced from DMEA ground 1,140 tons of concentrate valued at $105,598, which was sufficient to liquidate all royalty due. Total royalty due was paid Dec. 15, 1955.

	Tons	Analysis
Original Estimate of DMEA: Reserves (Field Team Final Report) Mines /x/ Survey /___/ Joint /___/	166,696	Mn 20.26 %
Revised Estimate of DMEA Reserves (Field Team) Mines /___/ Survey /___/ Joint /___/	100,000	7% recoverable Mn
Increase of Reserves by work performed subsequent to DMEA project work	None	
Production DMEA ore (This period)	None	
(Previous)	About 18,000	
(To date)	" 18,000	
" Operator's ore found subsequent to DMEA work (This period)		
(Previous)		
(To date)		

Percent Revised Reserves mined 18

(FOR URANIUM ORES ONLY)

Initial Production Bonus:

Status of Operator: Ineligible ( ) Applied for ( ) Receiving payment ( ) Paid up ( )

Pounds U_3O_8 produced this period eligible for Bonus _____

Amount of Bonus paid to Operator this period $ _____

Total pounds U_3O_8 produced to date eligible for Bonus _____

Total amount of Bonus paid to Operator to date $ _____

Bonus Royalty Paid $ _____ Bonus Royalty Due $ _____

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
		20 ton per hr. heavy media			

Remarks:

(See supplemental sheet attached)

Signed H. L. BURMEISTER
Engineer

Remarks:

Operation was erratic with very few records kept at the mine, and operational data could not be procured from the New York offices of the company. Downward revision of estimated reserves is due to finding much high phosphorus ore and an increase in wad during mining operations.

After completion of exploration a heavy media concentrator was installed. Mill operation was spasmodic and of poor caliber, finally reaching a maximum of 20 tons per hour. Operations ceased in the fall of 1954 when the mill was dismantled and moved off of the property.

All production was from poorly planned and executed surface mining by 1/3-yd. diesel shovel. The surface was left in such a condition that it is highly improbable that additional ore can be surface-mined. The old underground workings are caved leaving it doubtful that little if any further production will be made.

DMEA

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

July 26, 1954

Memorandum

To: C. O. Mittendorf, Administrator, DMEA

From: Executive Officer, DMEA Field Team, Region VIII

Subject: Docket No. DMEA-2359 - (Manganese)
Old Dominion Manganese Co., Inc.
Mineral Ridge Mine, Shenandoah and
Frederick Counties, Virginia
Contract No. Idm-E374

The attached letter dated July 23, 1954, from Mr. Robert C. Stephenson, Manager, Old Dominion Manganese Co., Inc., is being sent to you for further action.

A copy of our reply of July 26 to Mr. Stephenson is also attached.

W. T. Millar

W. T. Millar

Attachments

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

July 26, 1954

Mr. Robert C. Stephenson, Manager
Old Dominion Manganese Co., Inc.
Room 2500 Girard Trust Building
Philadelphia 2, Pennsylvania

Subj: Docket No. DMEA-2359
(Manganese)
Contract No. Idm-2374

Dear Mr. Stephenson:

This acknowledges your letter of July 23 regarding the certification of the subject exploration project.

This matter is being referred to Mr. C. O. Mittendorf, Administrator, Defense Minerals Exploration Administration, Interior Building, Washington 25, D. C.

It is suggested that further discussions regarding this contract be arranged by appointment with Mr. Mittendorf.

Very truly yours,

W. T. Millar, Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII

copy for Mr. John B. Lewis
✓ Mr. Mittendorf
DMEA Files - 2

OLD DOMINION MANGANESE COMPANY
INCORPORATED
STAR TANNERY, VIRGINIA

July 23, 1954

PLEASE REPLY TO:
ROOM 2500 GIRARD TRUST BLDG.
PHILADELPHIA 2, PA.
LOCUST 4-5600

Mr. W. T. Millar, Executive Officer
Bureau-Survey Field Team
United States Department of the Interior
Defense Minerals Exploration
Administration, Region VIII
College Park, Maryland

Dear Mr. Millar: Docket No. DMEA-2359 (Manganese)
Contract No. I dm-E374

Your letter of July 12 has been received.

The status of the DMEA exploration contract was discussed in considerable detail at a meeting of the Board of Directors of the Old Dominion Manganese Company yesterday. It was the unanimous opinion of this board that, for reasons outlined in my letter of July 1, a certificate of discovery is not justified. The position of the Board of Directors on this matter is that mining-milling investments based on DMEA exploration results have been unsound due to the failure of DMEA ground to live up to projected production based on these results, therefore the certification is not justified.

It is recognized that royalty payments are due and payable if a certificate is declared, but there is reasonable and justified doubt as to the basis for this certification. The Company is of the opinion that it is entitled to more explicit consideration of the certification.

My suggestion would be that we arrange a conference to discuss this matter at your convenience.

Very truly yours,

Robert C. Stephenson
Manager

RCS:EG

cc. Mr. John B. Lewis

BUREAU OF MINES
COLLEGE PARK, MD.

1954 JUL 25 PM 2:48

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

Royalty

July 12, 1954

Mr. Robert C. Stephenson, Mgr.
Old Dominion Manganese Co., Inc.
Room 2500 Girard Trust Bldg.
Philadelphia 2, Pennsylvania

Subj: Docket No. DMEA-2359
(Manganese)
Contract No. Idm-B374

Dear Mr. Stephenson:

Your prompt attention in supplying photostatic copies of settlement sheets covering shipments from the property explored under this contract, from September 4, 1953 to July 1, 1954, is appreciated.

Referring to your second letter of July 1, expressing the Company's opinion that a Certificate of Discovery or Development is not justified, please refer to Article 9 of the contract. It is concisely stated that royalty payments are due on the net sales of the production from the deposit. Shipments have been made from the deposit explored under this contract since June 1953, and royalty payments are due and payable.

Very truly yours,

Miller's Semi-Annual Report on Certified Projects, July 12, 1954, says: "This Operation is shipping manganese concentrate. Royalty payments are expected within three weeks"

W. T. Miller, Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII

WSA
7/14/54

WTM:rwa

copies for- JohnBLewis, Pres., Old Dom. Mn. Co., Inc.
Room 2100, 52 Wall St., New York 5, N. Y.
✓ - GeoCSelfridge, Chrm., DMEA Oper. Comm. - 2
- DMEA Files 2

Royalty

Docket

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

July 12, 1954

Memorandum

To: George C. Selfridge, Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region VIII

Subject: Docket No. DMEA-2359 - (Manganese)
Old Dominion Manganese Co., Inc.
Mineral Ridge Mine, Shenandoah and
Frederick Counties, Virginia
Contract No. Idm-E374

Transmitted herewith are four photostatic copies of each of the following, for your consideration:

Letter of July 1, 1954 to W. T. Millar from R. C. Stephenson, enclosing a Summary Record of Manganese Shipments by Old Dominion Manganese Co., Inc., up to July 1, 1954, and Settlement Sheets with Acceptance Nos. 88, 89, 97, 105, 122, 123, 213, 214, 245, 285, 286, 298, 299, 312, 313, 327 and 328.

Letter of July 1, 1954 to W. T. Millar from R. C. Stephenson, regarding Certificate of Discovery or Development.

Regarding the letter offering the Company's opinion on issuing the Certificate of Discovery or Development, this office considers that the opinions are not in accordance with the contract.

W. T. Millar

W. T. Millar

Enclosures

W. S. Martin

OLD DOMINION MANGANESE COMPANY
INCORPORATED
STAR TANNERY, VIRGINIA

July 1, 1954.

PLEASE REPLY TO:
ROOM 2500 GIRARD TRUST BLDG.
PHILADELPHIA 2, PA.
LOCUST 4-5600

Mr. W. T. Millar, Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII
U. S. Dept. of the Interior
College Park, Maryland

SUBJECT: Docket No. DMEA-2359 (Manganese)
Contract No. Idm-E-374

Dear Mr. Millar:

We have reviewed the certification of discovery covering Exploration Project Contract Idm-E-374 submitted with a letter of transmittal by C. O. Mittendorf, Administrator, DMEA, Washington 25, D. C.

We recognize that the terms of the Exploration Contract are quite vague and poorly-defined with respect to what shall constitute a discovery, but we have reason to question that the exploration conducted on the Old Dominion property under DMEA auspices actually led to a discovery or development of ore reserves.

From the final report on the exploration project, it was indicated that sampling and analysis of test pits and trenches outlined 1650 linear feet averaging 10.3 feet thick and analyzing an average of 15.9% manganese giving a quantity of possible ore in the amount of 40,000 tons.

Subsequent mining in the areas from NP1 to NP10 has shown the conclusions drawn from the exploration to be incorrect and misleading. The basic factors contributing to this conclusion have been borne out in subsequent mining as follows:

1. The average thickness of the ore zone is on the order of 6 to 7 feet, not 10.3 feet as the exploration indicated.

2. The ore zone pinches and swells so that there are barren zones up to 100 feet in length developed along the strike, seriously affecting open pit mining procedures.

3. The manganese values obtained in the channel sampling are unrealistically, but inadvertently, high because the ore is soft and the gangue chert is hard, leading to unavoidable upgrading of samples.

4. A high percentage of unrecoverable wad ore has rendered considerable portions of the ore zone worthless as mill feed.

If subsequent mining had borne out the exploration conclusion that there was 1650 linear feet of mineralization that could be expected to average 8 feet or more in thickness, and have an average manganese content of 15%, there would be justifiable claim for discovery even though the reserves so developed were possible (inferred), not proven or probable. This is not the case, however. Projections based on the results of the DMEA exploration studies with regard to mining and milling have been erroneous and financially unsound.

By classic definition, an ore is a mineral deposit which can be worked at a profit. To date, the Old Dominion Manganese Company, Inc. has not proven that the Mineral Ridge property can be worked at a profit.

True, part of our operational losses to date have resulted from changes required in our milling circuit to adapt it to the Mineral Ridge ore which does not respond satisfactorily to conventional manganese processing. Within the last two months, our mill has been producing in a very satisfactory manner.

The amenability of the Mineral Ridge ore to beneficiation in our mill has been clearly established. With the failure of the "DMEA ground" to produce ore as anticipated, the future success of the Old Dominion Manganese Company, Inc. hinges on the quality and grade of ore to the mill available for milling - and the outlook is not promising. The Company has stepped up prospecting on its own in an effort to overcome the problem.

It is true that we have mined sufficient ore from "DMEA ground" to repay, in the form of royalties, the Government contribution to the exploration program. However, we did so at an operational loss, and - because of the failure of "DMEA ground" to live up to expectations - the return from mining and milling investments is not as anticipated.

In Summary: The results of the DMEA prospecting on the Mineral Ridge ore body of Old Dominion Manganese Company, Inc. have proven to be misleading. Projections with regard to mining and milling investments based on these data have likewise been incorrect. Based on these facts, there is reasonable doubt as to whether there was an actual discovery of economically extractable ore made as a result of the DMEA exploration work.

Until such time as Old Dominion Manganese Company, Inc. has shown that it can operate profitably on ores derived from the "DMEA ground" as a whole, it would appear that a certificate of dis-

covery is not merited.

Very truly yours,

OLD DOMINION MANGANESE CO. INC.

Robert C. Stephenson, Manager

RCS/fm

4

OLD DOMINION MANGANESE COMPANY
INCORPORATED
STAR TANNERY, VIRGINIA

July 1, 1954.

PLEASE REPLY TO:
ROOM 2500 GIRARD TRUST BLDG.
PHILADELPHIA 2, PA.
LOCUST 4-5600

Mr. W. T. Millar, Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII
U. S. Dept. of the Interior
College Park, Maryland

SUBJECT: Docket No. DMEA-2359
(Manganese)
Contract No. Idm-E-374

Dear Mr. Millar:

In response to your letter of June 23rd, we are submitting on an attached sheet a summary of all manganese shipments made from the property of the Old Dominion Manganese Company, Inc. from September 4, 1953, to the present, together with photostatic copies of invoices covering these shipments.

Since our ore is not mined and directly processed, but is stockpiled for blending purposes, it is not possible to derive directly the quantity of concentrates produced from ore originating on "DMEA ground". Instead, a comparison of the quantity ore mined from DMEA ground versus ore mined from reserved ground will give a percentage figure that may be applied to the concentrates during this period in order to ascertain the percentage interest of DMEA in the concentrates produced.

At the time that we were advised of the certification of discovery on April 28, 1953, a sufficient amount had accrued from shipments to cover the amount due the Government in royalty payments in event of a discovery certification. It was not therefore deemed necessary to advise the purchaser to make royalty deductions.

Very truly yours,

OLD DOMINION MANGANESE CO. INC.

Robert C. Stephenson, Manager

RCS/fm

Encl.

SUMMARY RECORD OF MANGANESE SHIPMENTS
by
OLD DOMINION MANGANESE CO. INC.
up to July 1, 1954

OUR CAR NO.	RR CAR NO.	GSA ACCEPT-ANCE NO.	ACCEPT-ANCE DATE	LWT	LDT	VALUE	PAY-MENT REC'D.
1-14	---------- record filed with DMEA final project report ----------						
15-24	-	105	12/1/53	-	521.68487	$44,606.34	✓
25-34	-	245	5/5/54	-	518.2408	45,210.72	✓
35	B&O 262221	285	6/7/54	-	56.3225	4,933.34	✓
36	B&O 552877	286	6/7/54	-	57.7130	5,128.46	✓
37	B&O 250461	298	6/14/54	-	60.3541	5,627.42	✓
38	B&O 262009	299	6/14/54	-	55.8819	5,116.55	✓
39	B&O 264440	312	6/21/54	-	63.9503	5,943.12	-
40	B&O 250302	313	6/21/54	-	51.2282	4,512.30	-
41	B&O 251350	327	6/28/54	-	49.7788	4,760.55	-
42	B&O 350082	328	6/28/54	-	49.5382	4,514.91	-
43	B&O 252540	-	-	60.9821	-	-	-
44	NKP 77162	-	-	53.3929	-	-	-

- -

SOURCE OF ORE SEPTEMBER 1, 1953 - May 31, 1954

	TONS	%
DMEA Ground	13,144	44.03
Non-DMEA Ground	16,711	55.97
TOTAL	29,855	100%

Form approved by Comptroller General, U.S. September 26, 1952

GENERAL SERVICES ADMINISTRATION
DOMESTIC MANGANESE PURCHASE PROGRAM
(CARLOAD LOTS)

ACCEPTANCE AND INVOICE

DATE

ACCEPTANCE NUMBER 88

TO
Old Dominion Manganese Co., Inc.
c/o J. Lewis
52 Wall St., Room 2100, New York, N. Y.

ISSUED UNDER CERTIFICATE OF AUTHORIZATION NUMBER
Certificate #3-6
GS-00P-7368(SCM)

Subject to the terms and conditions of the Manganese Regulation establishing the Government's Purchase Program for Domestic Manganese Ore or Concentrates in carload lots, the Government accepts 49.821 long tons (wet basis) of [x] Manganese Ore [ ] Concentrates delivered f.o.b. by you at Strasburg, Va., consigned to U. S. Naval Warehouse, at Point Pleasant, W. Va. on B/L No. NYC 633591. Such material has a moisture content of 2.37 % and analyses in a dry basis as follows:

	PERCENT
MANGANESE (Mn)	41.98
IRON (Fe)	8.00
SILICA (SiO_2) PLUS ALUMINA (Al_2O_3)	12.34
PHOSPHOROUS (P)	.232
COPPER PLUS LEAD PLUS ZINC (Cu + Pb + Zn)	.13

EVALUATION AND SETTLEMENT DATA

	DOLLARS
BASE PRICE - PER L.D.T. UNIT	2.30

PREMIUMS	DIFFERENCE		DOLLARS		DOLLARS
Mn ABOVE 48%	0000	x	.005	=	0000
Fe BELOW 6%	0000	x	.005	=	0000

	DOLLARS
NET INCREASE	0000

PENALTIES	DIFFERENCE		DOLLARS		DOLLARS
Mn BELOW 48% TO AND INCLUDING 44%	4.0000	x	.01	=	.0400
Mn BELOW 44% TO AND INCLUDING 40%	2.0200	x	.015	=	.0303
Fe ABOVE 6% TO AND INCLUDING 8%	2.000	x	.01	=	.0200
Fe ABOVE 8% TO AND INCLUDING 16%	.0000	x	.0075	=	.0000
SiO_2 + Al_2O_3 ABOVE 11% TO AND INCLUDING 15%	1.3400	x	.01	=	.0134
P ABOVE 0.12% TO AND INCLUDING 0.30% *	.1120	x	.0033	=	.0373

*(1/3¢ per each .01%)

NET DECREASE	.1410
NET AMOUNT OF ADJUSTMENT PLUS	.0000
NET AMOUNT OF ADJUSTMENT MINUS	.1410
ADJUSTED BASE PRICE - PER L.D.T. UNIT	2.1590

LONG WET TONS		MOISTURE CONTENT		LONG DRY TONS		% Mn.		L.D.T. UNITS		ADJUSTED BASE PRICE		PAYMENT
49.821	-	1.180	=	48.641	x	41.98	=	2041.94918	x	2.16	=	$4,410.61

ACCEPTANCE

RECEIVED AND ACCEPTED BY GENERAL SERVICES ADMINISTRATION AT

BY (Type name) F. W. Witt

SIGNATURE

TITLE Coordinator of Sales

FOR USE OF PRODUCER ONLY

INVOICE

TO General Services Administration

REGION NUMBER

CITY AND STATE

FOR [ ] MANGANESE ORE [ ] CONCENTRATES 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 material was mined in the Continental United States.

PRODUCER (Type name) OLD DOMINION MANGANESE COMPANY, INC.

DATE October 13, 1953

BY (Signature)

TITLE President

GSA-WASH DC 53-3922

GSA FORM 1037

16

Form approved by Comptroller General, U.S. September 26, 1952

GENERAL SERVICES ADMINISTRATION
DOMESTIC MANGANESE PURCHASE PROGRAM
(CARLOAD LOTS)

ACCEPTANCE AND INVOICE

DATE

ACCEPTANCE NUMBER 89

ISSUED UNDER CERTIFICATE OF AUTHORIZATION NUMBER
Certificate #3-6
GS-OOP-7368(SCM)

TO
Old Dominion Manganese Co., Inc.
c/o J. Lewis
52 Wall Street, Room 2100, New York, N. Y.

Subject to the terms and conditions of the Manganese Regulation establishing the Government's Purchase Program for Domestic Manganese Ore or Concentrates in carload lots, the Government accepts 46.964 long tons (wet basis) of [x] Manganese Ore [ ] Concentrates delivered f.o.b. by you at Strasburg, Va. _____, consigned to U. S. Naval Warehouse, at Point Pleasant, W. Va. on B/L No. ACL 95967. Such material has a moisture content of 2.13 % and analyses in a dry basis as follows:

	PERCENT
MANGANESE (Mn)	40.49
IRON (Fe)	8.30
SILICA (SiO_2) PLUS ALUMINA (Al_2O_3)	14.31
PHOSPHOROUS (P)	.222
COPPER PLUS LEAD PLUS ZINC (Cu + Pb + Zn)	.17

EVALUATION AND SETTLEMENT DATA

	DOLLARS
BASE PRICE - PER L.D.T. UNIT	2.30

PREMIUMS	DIFFERENCE		DOLLARS		DOLLARS
Mn ABOVE 48%	.0000	X	.005	=	.0000
Fe BELOW 5%	.0000	X	.005	=	.0000

	DOLLARS
NET INCREASE	.0000

PENALTIES	DIFFERENCE		DOLLARS		DOLLARS
Mn BELOW 48% TO AND INCLUDING 44%	4.0000	X	.01	=	.0400
Mn BELOW 44% TO AND INCLUDING 40%	3.510	X	.015	=	.0526
Fe ABOVE 5% TO AND INCLUDING 8%	2.0000	X	.01	=	.0200
Fe ABOVE 8% TO AND INCLUDING 16%	.3000	X	.0075	=	.0022
SiO_2 + Al_2O_3 ABOVE 11% TO AND INCLUDING 15%	3.3100	X	.01	=	.0331
P ABOVE 0.12% TO AND INCLUDING 0.30%	.1020	X	.0033	=	.0340

*(1/3 ¢ per each .01%)

	DOLLARS
NET DECREASE	.1819

		DOLLARS
NET AMOUNT OF ADJUSTMENT	PLUS	.0000
	MINUS	.1819
ADJUSTED BASE PRICE - PER L.D.T. UNIT		2.1181

LONG WET TONS		MOISTURE CONTENT		LONG DRY TONS		% Mn.		L.D.T. UNITS		ADJUSTED BASE PRICE		PAYMENT
46.964	-	1.000	=	45.964	X	40.49	=	1861.08236	X	2.12	=	3,945.494

ACCEPTANCE

RECEIVED AND ACCEPTED BY GENERAL SERVICES ADMINISTRATION AT

BY (Type name) F. W. Witt | SIGNATURE | TITLE Coordinator of Sales

FOR USE OF PRODUCER ONLY

INVOICE

TO General Services Administration | REGION NUMBER | CITY AND STATE

FOR [ ] MANGANESE ORE [ ] CONCENTRATES 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 material was mined in the Continental United States.

PRODUCER OLD DOMINION MANGANESE COMPANY, INC. | DATE October 13, 1953

BY (Signature) [signature] | TITLE President

GSA-WASH DC 53-1922

GSA FORM 1037
September 1952

15

RESTRICTED

Form approved by Comptroller General, U.S. September 26, 1952

GENERAL SERVICES ADMINISTRATION
DOMESTIC MANGANESE PURCHASE PROGRAM
(CARLOAD LOTS)

ACCEPTANCE AND INVOICE

DATE: 11/16/53

ACCEPTANCE NUMBER: 97

ISSUED UNDER CERTIFICATE OF AUTHORIZATION NUMBER: Certificate # 3-6 GS-OOP-7368 (SCM)

TO
Old Dominion Manganese Co.
c/o J. Lewis
52 Wall St., Room 2100, New York, N. Y.

Subject to the terms and conditions of the Manganese Regulation establishing the Government's Purchase Program for Domestic Manganese Ore or Concentrates in carload lots, the Government accepts 387.0082 long tons (wet basis) of [x] Manganese Ore [ ] Concentrates delivered f.o.b. by you at Strasburg, Va, consigned to U.S. Naval Warehouse, at Point Pleasant, W. Va. on B/L No. *633591 *95967. Such material has a moisture content of _____% and analyses in a dry basis as follows: 9107, 89163, 12216, 48321, 167649 (*paid on acceptances 88 & 89)

computed on average weighted basis, dry weight

	PERCENT
MANGANESE (Mn)	40.247252
IRON (Fe)	7.697821
SILICA (SiO_2) PLUS ALUMINA (Al_2O_3)	12.394004
PHOSPHOROUS (P)	.235742
COPPER PLUS LEAD PLUS ZINC (Cu + Pb + Zn)	.148752

EVALUATION AND SETTLEMENT DATA

	DOLLARS
BASE PRICE - PER L.D.T. UNIT	2.30

PREMIUMS	DIFFERENCE		DOLLARS		DOLLARS
Mn ABOVE 48%	.0000	X	.005	=	.0000
Fe BELOW 5%	.0000	X	.005	=	.0000

	DOLLARS
NET INCREASE	.0000

PENALTIES	DIFFERENCE		DOLLARS		DOLLARS
Mn BELOW 45% TO AND INCLUDING 44%	4.0000	X	.01	=	.0400
Mn BELOW 44% TO AND INCLUDING 40%	3.7528	X	.015	=	.0562
Fe ABOVE 5% TO AND INCLUDING 8%	1.6978	X	.01	=	.0169
Fe ABOVE 8% TO AND INCLUDING 10%	.0000	X	.0075	=	.0000
SiO_2 + Al_2O_3 ABOVE 11% TO AND INCLUDING 15%	1.3948	X	.01	=	.0139
P ABOVE 0.12% TO AND INCLUDING 0.30%	.1157	X	.0033	=	.0365
(1/3¢ for ea .01)				NET DECREASE	.1655

NET AMOUNT OF ADJUSTMENT	PLUS	.0000
	MINUS	.1655
ADJUSTED BASE PRICE - PER L.D.T. UNIT		2.1345

LONG WET TONS		MOISTURE CONTENT		LONG DRY TONS		% Mn.		L.D.T. UNITS		ADJUSTED BASE PRICE		PAYMENT
387.00820	-	9.40262	=	377.60558	X	40.24725	=	15,197.58617	X	$ 2.13	=	$32,370.858
												32,370.86
										previously paid		8,356.10
												24,014.76

ACCEPTANCE

RECEIVED AND ACCEPTED BY GENERAL SERVICES ADMINISTRATION AT

BY (Type name)	SIGNATURE	TITLE
F. M. Witt		Coordinator of Sales

FOR USE OF PRODUCER ONLY

INVOICE

TO	REGION NUMBER	CITY AND STATE
General Services Administration		

FOR [ ] MANGANESE ORE [ ] CONCENTRATES 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 material was mined in the Continental United States.

PRODUCER (Type name)	DATE
OLD DOMINION MANGANESE COMPANY, INC.	November 19, 1953
BY (Signature)	TITLE
JBL	President

GSA-WASH DC 53-3922

RESTRICTED

GSA FORM 1037
September 1952

RESTRICTED

14

Form approved by Comptroller General, U.S. September 26, 1952

GENERAL SERVICES ADMINISTRATION
DOMESTIC MANGANESE PURCHASE PROGRAM
(CARLOAD LOTS)

ACCEPTANCE AND INVOICE

DATE: 12/1/53

ACCEPTANCE NUMBER: 106

ISSUED UNDER CERTIFICATE OF AUTHORIZATION NUMBER: Certificate # 3-6 G-OOF-7868 (SCM)

TO: Old Dominion Manganese Co.
c/o J. Lewis
52 Wall St., Room 2100, New York, N. Y.

Subject to the terms and conditions of the Manganese Regulation establishing the Government's Purchase Program for Domestic Manganese Ore or Concentrates in carload lots, the Government accepts 542.99032 long tons (wet basis) of [X] Manganese Ore [ ] Concentrates delivered f.o.b. by you at Strasburg, Va, consigned to U.S. Naval warehouse, at Point Pleasant, W. Va. on B/L No. *63591, *[illegible]. Such material has a moisture content of ____% and analyses in a dry basis as follows: *91078, *[illegible], *12216, *48321, *167649, 34250, 34187, 360570 *(paid on B. certificates 88, 89 and 97)

	PERCENT
MANGANESE (Mn)	40.14296
IRON (Fe)	8.74188
SILICA (SiO_2) PLUS ALUMINA (Al_2O_3) (Computed on average wet-dried basis, [illegible] weight)	11.74154
PHOSPHOROUS (P)	.24613
COPPER PLUS LEAD PLUS ZINC (Cu + Pb + Zn)	.16343

EVALUATION AND SETTLEMENT DATA

	DOLLARS
BASE PRICE - PER L.D.T. UNIT	2.30

PREMIUMS	DIFFERENCE		DOLLARS		DOLLARS
Mn ABOVE 48%	.0000	X	.005	=	.0000
Fe BELOW 6%	.0000	X	.005	=	.0000
NET INCREASE					.000

PENALTIES	DIFFERENCE		DOLLARS		DOLLARS
Mn BELOW 48% TO AND INCLUDING 44%	4.0000	X	.01	=	.0400
Mn BELOW 44% TO AND INCLUDING 40%	3.8571	X	.015	=	.0578
Fe ABOVE 6% TO AND INCLUDING 8%	2.0000	X	.01	=	.0200
Fe ABOVE 8% TO AND INCLUDING 16%	.7413	X	.0075	=	.0055
SiO_2 + Al_2O_3 ABOVE 11% TO AND INCLUDING 15%	.7415	X	.01	=	.0074
P ABOVE 0.12% TO AND INCLUDING 0.30%	.1261	X	.0033	=	.0420
(1/27 for ea .01) NET DECREASE					.1727

		DOLLARS
NET AMOUNT OF ADJUSTMENT	PLUS	.0000
	MINUS	.1727
ADJUSTED BASE PRICE - PER L.D.T. UNIT		2.1273

LONG WET TONS		MOISTURE CONTENT		LONG DRY TONS		% Mn.		L.D.T. UNITS		ADJUSTED BASE PRICE		PAYMENT
542.99032	-	21.80545	=	521.68487	X	40.1429	=	20941.34566	X	$2.13	$	44,606.330

ACCEPTANCE

RECEIVED AND ACCEPTED BY GENERAL SERVICES ADMINISTRATION AT

	44,606.34
Previously paid	$ 32,370.86
	$ 12,235.48

BY (Type name): F. W. Witt
SIGNATURE:
TITLE: Coordinator of Sales

FOR USE OF PRODUCER ONLY

INVOICE

TO: General Services Administration
REGION NUMBER:
CITY AND STATE:

FOR [ ] MANGANESE ORE [ ] CONCENTRATES delivered as indicated above $ [illegible]

I certify that the above bill is correct and just and that payment therefor has not been received. The producer warrants that said material was mined in the Continental United States.

PRODUCER (Type name): OLD DOMINION MANGANESE COMPANY, INC.
DATE: December 3, 1953
BY (Signature): [illegible]
TITLE: President

RESTRICTED

GSA FORM 1037 September 1952

[illegible] AV PRO[illegible] - LC CAR LOT

CARLIS-24

22

Form approved by Comptroller General, U.S. September 26, 1952

GENERAL SERVICES ADMINISTRATION
DOMESTIC MANGANESE PURCHASE PROGRAM
(CARLOAD LOTS)

ACCEPTANCE AND INVOICE

DATE: 12/30/53

ACCEPTANCE NUMBER: 122

ISSUED UNDER CERTIFICATE OF AUTHORIZATION NUMBER: Certificate # 3-6 GS-00P-7368 (80M) 4

TO
Old Dominion Manganese Co.
c/o J. B. Lewis
52 Wall St., Room 2100, New York 5, N. Y.

Subject to the terms and conditions of the Manganese Regulation establishing the Government's Purchase Program for Domestic Manganese Ore or Concentrates in carload lots, the Government accepts 56.2946 long tons (wet basis) of [X] Manganese Ore [ ] Concentrates delivered f.o.b. by you at Star Tannery, Va., consigned to U. S. Naval Storehouse, at Point Pleasant, W. Va. on B/L No. C.R.R. 16102. Such material has a moisture content of 4.57 % and analyses in a dry basis as follows:

	PERCENT
MANGANESE (Mn)	40.70
IRON (Fe)	7.70
SILICA (SiO_2) PLUS ALUMINA (Al_2O_3)	10.13
PHOSPHOROUS (P)	.296
COPPER PLUS LEAD PLUS ZINC (Cu + Pb + Zn)	.13

EVALUATION AND SETTLEMENT DATA

	DOLLARS
BASE PRICE - PER L.D.T. UNIT	2.30

PREMIUMS	DIFFERENCE		DOLLARS		DOLLARS
Mn ABOVE 48%	.0000	X	.005	=	.0000
Fe BELOW 6%	.0000	X	.005	=	.0000

	DOLLARS
NET INCREASE	.0000

PENALTIES	DIFFERENCE		DOLLARS		DOLLARS
Mn BELOW 48% TO AND INCLUDING 44%	4.0000	X	.01	=	.0400
Mn BELOW 44% TO AND INCLUDING 40%	3.3000	X	.015	=	.0495
Fe ABOVE 6% TO AND INCLUDING 8%	1.7000	X	.01	=	.0170
Fe ABOVE 8% TO AND INCLUDING 10%	.0000	X	.0075	=	.0000
SiO_2 + Al_2O_3 ABOVE 11% TO AND INCLUDING 15%	.0000	X	.01	=	.0000
P ABOVE 0.12% TO AND INCLUDING 0.30%	.1760	X	.0033	=	.0586

(1/3¢ for each .01%)

	DOLLARS
NET DECREASE	.1651
NET AMOUNT OF ADJUSTMENT PLUS	.0000
NET AMOUNT OF ADJUSTMENT MINUS	.1651
ADJUSTED BASE PRICE - PER L.D.T. UNIT	2.1349

LONG WET TONS		MOISTURE CONTENT		LONG DRY TONS		% Mn.		L.D.T. UNITS		ADJUSTED BASE PRICE		PAYMENT
56.2946	-	2.5726	=	53.7220	X	40.70	=	2186.4854	X	2.13	=	$4,657.21

ACCEPTANCE

RECEIVED AND ACCEPTED BY GENERAL SERVICES ADMINISTRATION AT

BY (Type name): F. W. Witt

SIGNATURE:

TITLE: Coordinator of Sales

FOR USE OF PRODUCER ONLY

INVOICE

TO: General Services Administration

REGION NUMBER:

CITY AND STATE:

FOR [ ] MANGANESE ORE [ ] CONCENTRATES 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 material was mined in the Continental United States.

PRODUCER (Type name): OLD DOMINION MANGANESE COMPANY, INC.

DATE: December 31, 1953

BY (Signature):

TITLE: President

GSA-WASH DC 53-3922

GSA FORM 1037
September 1952

21

Form approved by Comptroller General, U.S. September 26, 1952

GENERAL SERVICES ADMINISTRATION
DOMESTIC MANGANESE PURCHASE PROGRAM
(CARLOAD LOTS)

ACCEPTANCE AND INVOICE

DATE: 12/30/53

ACCEPTANCE NUMBER: 123

ISSUED UNDER CERTIFICATE OF AUTHORIZATION NUMBER: Certificate # 3-6 GS-00P-7368(SCM)

TO
Old Dominion Manganese Company
c/o J. B. Lewis
52 Wall Street, Room 2100, New York 5, New York

Subject to the terms and conditions of the Manganese Regulation establishing the Government's Purchase Program for Domestic Manganese Ore or Concentrates in carload lots, the Government accepts 62.5892 long tons (wet basis) of [x] Manganese Ore [ ] Concentrates delivered f.o.b. by you at Star Tannery, Va., consigned to U. S. Naval Storehouse, at Point Pleasant, W. Va. on B/L No. PLE-2788. Such material has a moisture content of 4.99 % and analyses in a dry basis as follows:

	PERCENT
MANGANESE (Mn)	40.91
IRON (Fe)	6.10
SILICA (SiO_2) PLUS ALUMINA (Al_2O_3)	9.26
PHOSPHOROUS (P)	.30
COPPER PLUS LEAD PLUS ZINC (Cu + Pb + Zn)	.16

EVALUATION AND SETTLEMENT DATA

	DOLLARS
BASE PRICE - PER L.D.T. UNIT	2.30

PREMIUMS	DIFFERENCE		DOLLARS		DOLLARS
Mn ABOVE 48%	.0000	X	.005	=	.0000
Fe BELOW 6%	.0000	X	.005	=	.0000

NET INCREASE: .0000

PENALTIES	DIFFERENCE		DOLLARS		DOLLARS
Mn BELOW 48% TO AND INCLUDING 44%	4.0000	X	.01	=	.0400
Mn BELOW 44% TO AND INCLUDING 40%	3.0900	X	.015	=	.0463
Fe ABOVE 6% TO AND INCLUDING 8%	.1000	X	.01	=	.0010
Fe ABOVE 8% TO AND INCLUDING 16%	.0000	X	.0075	=	.0000
SiO_2 + Al_2O_3 ABOVE 11% TO AND INCLUDING 15%	.0000	X	.01	=	.0000
P ABOVE 0.12% TO AND INCLUDING 0.30%	.1800	X	.0033	=	.0600

(1/3¢ for each .01%)

NET DECREASE: .1473

NET AMOUNT OF ADJUSTMENT	PLUS	.0000
	MINUS	.1473
ADJUSTED BASE PRICE - PER L.D.T. UNIT		2.1527

LONG WET TONS		MOISTURE CONTENT		LONG DRY TONS		% Mn.		L.D.T. UNITS		ADJUSTED BASE PRICE		PAYMENT
62.5892	-	3.1232	=	59.466	X	40.91	=	2432.754	X	2.15	=	$5,230.42

ACCEPTANCE

RECEIVED AND ACCEPTED BY GENERAL SERVICES ADMINISTRATION AT

BY (Type name): F. W. Witt
SIGNATURE:
TITLE: Coordinator of Sales

FOR USE OF PRODUCER ONLY

INVOICE

TO: General Services Administration
REGION NUMBER:
CITY AND STATE:

FOR [ ] MANGANESE ORE [ ] CONCENTRATES 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 material was mined in the Continental United States.

PRODUCER (Type name): OLD DOMINION MANGANESE COMPANY, INC.
DATE: December 31, 1953
BY (Signature):
TITLE: President

GSA-WASH DC 53-3922

GSA FORM 1037
September 1952

GENERAL SERVICES ADMINISTRATION
DOMESTIC MANGANESE PURCHASE PROGRAM
(CARLOAD LOTS)

ACCEPTANCE AND INVOICE

DATE: [illegible]/54

ACCEPTANCE NUMBER: 315

ISSUED UNDER CERTIFICATE OF AUTHORIZATION NUMBER: Certificate [illegible]
[illegible]-073[illegible](SCB)

[illegible] Manganese Co. Inc.
c/o [illegible] Lewis
[illegible] Hall Street, Room 2100
New York [illegible]

Subject to the terms and conditions of the Manganese Regulation establishing the Government's Purchase Program for Domestic Manganese Ore or Concentrates in carload lots, the Government accepts [illegible] long tons (wet basis) of ☐ Manganese Ore ☐ Concentrates delivered f.o.b. by you at Star Tannery, consigned to [illegible] Naval Storehouse, at Point Pleasant, N. J. on B.L. No. [illegible] 2709. Such material has a moisture content of _____% and analyses in a dry basis as follows: [illegible], 564121, 818802, 7895 (Bills of acceptance, 182, 183)

	PERCENT
MANGANESE (Mn) (Estimated Average, Dry Basis)	40.2874
[illegible] ALUMINA (Al_2O_3)	7.1567
[illegible]	10.[illegible]51
[illegible] LEAD + ZINC (Cu + Pb + Zn)	.[illegible]
[illegible]	.1905

EVALUATION AND SETTLEMENT DATA

	DOLLARS
BASE PRICE – PER L.D.T. UNIT	2.30

	DIFFERENCE		DOLLARS		DOLLARS
[illegible]	.0[illegible]	X	.006	=	.0[illegible]
[illegible]	.0000	X	.005	=	.0000

	DOLLARS
NET INCREASE	.0000

	DIFFERENCE		DOLLARS		DOLLARS
[illegible]	.0000	X	.01	=	.0000
[illegible]	2.7[illegible]	X	.015	=	.0[illegible]
[illegible]	1.1567	X	.01	=	.0116
[illegible]	.0000	X	.0075	=	.0000
[illegible]	.0000	X	.01	=	.0000
[illegible]	.1[illegible]	X	.0033	=	.0001
([illegible] % = [illegible])					

	DOLLARS
NET DECREASE	.1[illegible]
NET AMOUNT OF ADJUSTMENT PLUS	.0000
NET AMOUNT OF ADJUSTMENT MINUS	.1[illegible]
ADJUSTED BASE PRICE – PER L.D.T. UNIT	2.1[illegible]

	GROSS DRY TONS		% Mn.		L.D.T. UNITS		ADJUSTED BASE PRICE		PAYMENT
[illegible]	[illegible]	X	[illegible]	=	[illegible]	X	[illegible]	=	$[illegible]
ACCEPTANCE							Previously [illegible]		[illegible]
[illegible]									$[illegible]

[illegible] SERVICES ADMINISTRATION AT
[illegible]
SIGNATURE: [illegible]
TITLE: Coordinator of Sales

FOR USE OF PRODUCER ONLY

INVOICE

	REGION NUMBER	CITY AND STATE
[illegible] Administration	3	Washington, D.C.
[illegible] voucher as indicated above		$ 20,981.34

[illegible] is correct and just and that payment therefor has not been received. The [illegible] was mined in the Continental United States.

SIGNATURE: [illegible]
DATE: 4/15/54
TITLE: Vice President & Manager

GSA FORM 1037

Approved by
Comptroller General, U.S.
September 26, 1952

GENERAL SERVICES ADMINISTRATION
DOMESTIC MANGANESE PURCHASE PROGRAM
(CARLOAD LOTS)

ACCEPTANCE AND INVOICE

DATE 4-24-54

ACCEPTANCE NUMBER
224

ISSUED UNDER AUTHORIZATION NUMBER
Certificate # 3-6
GS-70P-7368(SCM)

TO
Old Dominion Manganese Co. Inc.
Attn: B. Lewis, 52 Wall Street
New York 5, N. Y.

Subject to the terms and conditions of the Manganese Regulation establishing the Government's Purchase Program for Domestic Manganese Ore or Concentrates in carload lots, the Government accepts 427.3122 long tons (wet basis) of [X] Manganese Ore [ ] Concentrates delivered f.o.b. by you at Star Jumpy, W. Va., consigned to U. S. Naval Storehouse, at Point Pleasant, W. Va. on B/L No. 1230 253594. Such material has a moisture content of ___% and analyzes in a dry basis as follows: *16102, *2788, *639306, *2593, *54121, *251482, *97375 (% on 6000 pounds 122, 123 and 213.)

Weighted Average (Dry Basis)

[illegible]
[illegible] ALUMINA (Al2O3)
[illegible] PLUS ZINC [illegible]

EVALUATION AND SETTLEMENT DATA

[illegible]	.0000	[illegible]	.0000
[illegible]	.0000	[illegible]	.0000

[illegible]	4.0010	[illegible]	[illegible]
[illegible]	3.6423	[illegible]	[illegible]
[illegible]	1.1136	[illegible]	[illegible]
[illegible]	.0000	[illegible]	.0000
[illegible]	.0000	[illegible]	.0000
[illegible]	.1629	[illegible]	[illegible]

[illegible]/22 for each [illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

ACCEPTED

[illegible]

[illegible] Administration

[illegible] and Investment

It is correct and [illegible]
Material was [illegible]

[illegible]

18

Form approved by Comptroller General, U.S. September 26, 1952

GENERAL SERVICES ADMINISTRATION
DOMESTIC MANGANESE PURCHASE PROGRAM
(CARLOAD LOTS)

ACCEPTANCE AND INVOICE

DATE: 5/ 5/54

ACCEPTANCE NUMBER: 245

ISSUED UNDER CERTIFICATE OF AUTHORIZATION NUMBER: Certificate # 3-6 GS-OOP-7368(SCM)

TO
Old Dominion Manganese Co. Inc.
c/o J. B. Lewis, 52 Wall St., Room 2100
New York 5, New York

Subject to the terms and conditions of the Manganese Regulation establishing the Government's Purchase Program for Domestic Manganese Ore or Concentrates in carload lots, the Government accepts 544.7764 long tons (wet basis) of [x] Manganese Ore [ ] Concentrates delivered f.o.b. by you at Star Quarry, Va. cars, consigned to U.S. Naval Storehouse, at Point Pleasant, W. Va. on ~~BX~~ No. B&O 252060. Such material has a moisture content of ____% and analyses in a dry basis as follows: 264302
*16102, *2788, *639306, *2598, *554121, *251882, *97 75, *253534, (*paid on acceptances 122, 123, 215, and 214)

	PERCENT
MANGANESE (Mn) — Weighted Average (Dry Basis)	40.5762
IRON (Fe)	7.2485
SILICA (SiO_2) PLUS ALUMINA (Al_2O_3)	10.1922
PHOSPHOROUS (P)	.2680
COPPER PLUS LEAD PLUS ZINC (Cu + Pb + Zn)	.1458

EVALUATION AND SETTLEMENT DATA

						DOLLARS
BASE PRICE - PER L.D.T. UNIT						2.30
PREMIUMS	DIFFERENCE		DOLLARS		DOLLARS	
Mn ABOVE 48%	.0000	x	.005	=	.0000	
Fe BELOW 6%	.0000	x	.005	=	.0000	
NET INCREASE						.0000
PENALTIES	DIFFERENCE		DOLLARS		DOLLARS	
Mn BELOW 48% TO AND INCLUDING 44%	4.0000	x	.01	=	.0400	
Mn BELOW 44% TO AND INCLUDING 40%	3.4238	x	.015	=	.0513	
Fe ABOVE 6% TO AND INCLUDING 8%	1.2495	x	.01	=	.0124	
Fe ABOVE 8% TO AND INCLUDING 16%	.0000	x	.0075	=	.0000	
SiO_2 + Al_2O_3 ABOVE 11% TO AND INCLUDING 15%	.0000	x	.01	=	.0000	
P ABOVE 0.12% TO AND INCLUDING 0.30%	14.8	x	.0033	=	.0493	
NET DECREASE						.1530
~~(1/3¢ for each .01%)~~						
NET AMOUNT OF ADJUSTMENT					PLUS	.0000
					MINUS	.1530
ADJUSTED BASE PRICE - PER L.D.T. UNIT						2.1470

LONG WET TONS		MOISTURE CONTENT		LONG DRY TONS		% Mn.		L.D.T. UNITS		ADJUSTED BASE PRICE		PAYMENT
544.7764	-	26.5356	=	518.2408	x	40.5762	=	21028.2423	x	2.15	=	$45210.72
												34853.47
												10357.25

ACCEPTANCE

RECEIVED AND ACCEPTED BY GENERAL SERVICES ADMINISTRATION AT

BY (Type name): F. M. Witt
SIGNATURE:
TITLE: Coordinator of Sales

FOR USE OF PRODUCER ONLY

INVOICE

TO: General Services Administration
REGION NUMBER:
CITY AND STATE:

FOR [ ] MANGANESE ORE [ ] CONCENTRATES delivered as indicated above
$ 10,357.25

I certify that the above bill is correct and just and that payment therefor has not been received. The producer warrants that said material was mined in the Continental United States.

PRODUCER (Type name): Old Dominion Manganese Co. Inc.
DATE: May 7, 1954
BY (Signature): John F. Cimino
TITLE: Contract Agent

GSA WASH DC 53-3922

GSA FORM 1037
September 1952

25-34

Form approved by Comptroller General, U.S. September 26, 1952

GENERAL SERVICES ADMINISTRATION
DOMESTIC MANGANESE PURCHASE PROGRAM
(CARLOAD LOTS)

ACCEPTANCE AND INVOICE

DATE: June 7, 1954

ACCEPTANCE NUMBER: 285

ISSUED UNDER CERTIFICATE OF AUTHORIZATION NUMBER: Certificate # 3-6 GS-00P-7368(SGM)

TO
Old Dominion Manganese Co. Inc.
c/o J. B. Lewis, 52 Wall Street, Room 2100
New York 5, N. Y.

Subject to the terms and conditions of the Manganese Regulation establishing the Government's Purchase Program for Domestic Manganese Ore or Concentrates in carload lots, the Government accepts 58.8839 long tons (wet basis) of [X] Manganese Ore [ ] Concentrates delivered f.o.b. by you at Star Tannery, Va. car, consigned to U. S. Naval Storehouse, at Point Pleasant, W. Va. on Box No. B&O 262221. Such material has a moisture content of 4.35% and analyses in a dry basis as follows:

	PERCENT
MANGANESE (Mn)	40.74
IRON (Fe)	8.30
SILICA (SiO_2) PLUS ALUMINA (Al_2O_3)	9.70
PHOSPHOROUS (P)	.242
COPPER PLUS LEAD PLUS ZINC (Cu + Pb + Zn)	.12

EVALUATION AND SETTLEMENT DATA

	DOLLARS
BASE PRICE - PER L.D.T. UNIT	2.30

PREMIUMS	DIFFERENCE		DOLLARS		DOLLARS
Mn ABOVE 48%	.0000	x	.005	=	.0000
Fe BELOW 6%	.0000	x	.005	=	.0000

	DOLLARS
NET INCREASE	.0000

PENALTIES	DIFFERENCE		DOLLARS		DOLLARS
Mn BELOW 48% TO AND INCLUDING 44%	4.000	x	.01	=	.0400
Mn BELOW 44% TO AND INCLUDING 40%	3.2600	x	.015	=	.0489
Fe ABOVE 6% TO AND INCLUDING 8%	2.0000	x	.01	=	.0200
Fe ABOVE 8% TO AND INCLUDING 16%	.30000	x	.0075	=	.0022
SiO_2 + Al_2O_3 ABOVE 11% TO AND INCLUDING 15%	.0000	x	.01	=	.0000
P ABOVE 0.12% TO AND INCLUDING 0.30%	12.2	x	.0033	=	.0406

(1/3¢ for each .01%) NET DECREASE .1517

NET AMOUNT OF ADJUSTMENT	PLUS	.0000
	MINUS	.1517
ADJUSTED BASE PRICE - PER L.D.T. UNIT		2.1483

LONG WET TONS		MOISTURE CONTENT		LONG DRY TONS		% Mn.		L.D.T. UNITS		ADJUSTED BASE PRICE		PAYMENT
58.8839	-	2.5614	=	56.3225	x	40.74	=	2294.5786	x	2.15	=	$4,933.34

ACCEPTANCE

RECEIVED AND ACCEPTED BY GENERAL SERVICES ADMINISTRATION AT

BY (Type name): F. W. Witt

SIGNATURE:

TITLE: Coordinator of Sales

FOR USE OF PRODUCER ONLY

INVOICE

TO: General Services Administration

REGION NUMBER:

CITY AND STATE:

FOR [ ] MANGANESE ORE [ ] CONCENTRATES delivered as indicated above $4,933.34

I certify that the above bill is correct and just and that payment therefor has not been received. The producer warrants that said material was mined in the Continental United States.

PRODUCER (Type name): Old Dominion Manganese Co. Inc.

DATE: June 7 1954

BY (Signature): John B. Lewis

TITLE: [illegible]

GSA-WASH DC 53-3920

GSA FORM 1037 September 1952

Form approved by Comptroller General, U.S. September 26, 1952

GENERAL SERVICES ADMINISTRATION
DOMESTIC MANGANESE PURCHASE PROGRAM
(CARLOAD LOTS)

ACCEPTANCE AND INVOICE

DATE: June 7, 1954

ACCEPTANCE NUMBER: 286

TO
Old Dominion Manganese Co., Inc.
c/o J. B. Lewis, 52 Wall St., Room 2100
New York 5, N.Y.

ISSUED UNDER CERTIFICATE OF AUTHORIZATION NUMBER
Certificate # 3-6
GS-COP-7368(SCM)

Subject to the terms and conditions of the Manganese Regulation establishing the Government's Purchase Program for Domestic Manganese Ore or Concentrates in carload lots, the Government accepts 59.9553 long tons (wet basis) of [x] Manganese Ore [ ] Concentrates delivered f.o.b. by you at Star Tannery, Va. car, consigned to U. S. Naval Storehouse, at Point Pleasant, W. Va. on [x] No. B&O 552877. Such material has a moisture content of 3.74 % and analyses in a dry basis as follows:

	PERCENT
MANGANESE (Mn)	40.95
IRON (Fe)	7.50
SILICA (SiO_2) PLUS ALUMINA (Al_2O_3)	7.54
PHOSPHOROUS (P)	.218
PPER PLUS LEAD PLUS ZINC (Cu + Pb + Zn)	.15

EVALUATION AND SETTLEMENT DATA

	DOLLARS
BASE PRICE - PER L.D.T. UNIT	2.30

PREMIUMS	DIFFERENCE		DOLLARS		DOLLARS
Mn ABOVE 48%	.0000	X	.005	=	.0000
Fe BELOW 6%	.0000	X	.005	=	.0000

	DOLLARS
NET INCREASE	.0000

PENALTIES	DIFFERENCE		DOLLARS		DOLLARS		
Mn BELOW 48% TO AND INCLUDING 44%	4.0000	X	.01	=	.0400	.04	.04
Mn BELOW 44% TO AND INCLUDING 40%	3.0500	X	.015	=	.0457	.03	.03
Fe ABOVE 6% TO AND INCLUDING 8%	1.5000	X	.01	=	.0150	.012	.002
Fe ABOVE 8% TO AND INCLUDING 16%	.0000	X	.0075	=	.0000	—	—
SiO_2 + Al_2O_3 ABOVE 11% TO AND INCLUDING 15%	.0000	X	.01	=	.0000	—	—
P ABOVE 0.12% TO AND INCLUDING 0.30%	9.8	X	.0033	=	.0326	.037	.014

(1/3¢ for each .01%)

NET DECREASE		.1333
NET AMOUNT OF ADJUSTMENT	PLUS	.0000
	MINUS	.1333
ADJUSTED BASE PRICE - PER L.D.T. UNIT		2.1667

LONG WET TONS		MOISTURE CONTENT		LONG DRY TONS		% Mn.		L.D.T. UNITS		ADJUSTED BASE PRICE		PAYMENT
59.9553	-	2.2423	=	57.7130	X	40.95	=	2363.3473	X	2.17	=	$5,128.46

ACCEPTANCE

RECEIVED AND ACCEPTED BY GENERAL SERVICES ADMINISTRATION AT

BY (Type name): F. W. Witt
SIGNATURE:
TITLE: Coordinator of Sales

FOR USE OF PRODUCER ONLY

INVOICE

TO: General Services Administration
REGION NUMBER:
CITY AND STATE:

FOR [ ] MANGANESE ORE [ ] CONCENTRATES delivered as indicated above $ 5128.46

I certify that the above bill is correct and just and that payment therefor has not been received. The producer warrants that said material was mined in the Continental United States.

PRODUCER (Type name): Old Dominion Manganese Co. Inc.
DATE: June 7 1954
BY (Signature): John Fleming
TITLE: Authorized Representative

GSA-WASH DC 53-3922

GSA FORM 1037
September 1952

Form approved by Comptroller General, U.S. September 26, 1952

GENERAL SERVICES ADMINISTRATION
DOMESTIC MANGANESE PURCHASE PROGRAM
(CARLOAD LOTS)

ACCEPTANCE AND INVOICE

DATE: June 14, 1954

ACCEPTANCE NUMBER: 298

ISSUED UNDER CERTIFICATE OF AUTHORIZATION NUMBER: Certificate # 3-6 GS-OOP-7368(SCM)

TO
Old Dominion Manganese Co., Inc.
c/o J. B. Lewis, 52 Wall St., Room 2100
New York 5, N. Y.

Subject to the terms and conditions of the Manganese Regulation establishing the Government's Purchase Program for Domestic Manganese Ore or Concentrates in carload lots, the Government accepts 62.6339 long tons (wet basis) of [x] Manganese Ore [ ] Concentrates delivered f.o.b. by you at Star Tannery, Va. car, consigned to U. S. Naval Storehouse, at Point Pleasant, W. Va. on ~~xxx~~ No. B&O 250461. Such material has a moisture content of 3.64% and analyses in a dry basis as follows:

	PERCENT
MANGANESE (Mn)	42.00
IRON (Fe)	5.90
SILICA (SiO_2) PLUS ALUMINA (Al_2O_3)	6.19
PHOSPHOROUS (P)	.162
COPPER PLUS LEAD PLUS ZINC (Cu + Pb + Zn)	.18

EVALUATION AND SETTLEMENT DATA

	DIFFERENCE		DOLLARS		DOLLARS		DOLLARS
BASE PRICE – PER L.D.T. UNIT						264440	250302
PREMIUMS							
Mn ABOVE 48%	.0000	X	.005	=	.0000		
Fe BELOW 6%	.1000	X	.005	=	.0005		
NET INCREASE						.0005	—
PENALTIES							
Mn BELOW 48% TO AND INCLUDING 44%	4.0000	X	.01	=	.0400	.0400	.0400
Mn BELOW 44% TO AND INCLUDING 40%	2.0000	X	.015	=	.0300	.0205	.0426
Fe ABOVE 6% TO AND INCLUDING 8%	.0000	X	.01	=	.0000	.0150	.0200
Fe ABOVE 8% TO AND INCLUDING 16%	.0000	X	.007	=	.0000	—	.0048
SiO_2 + Al_2O_3 ABOVE 11% TO AND INCLUDING 15%	.0000	X	.01	=	.0000	—	—
P ABOVE 0.12% TO AND INCLUDING 0.30%	4.2	X	.0033	=	.0140	.0442	.0488
(1/3¢ for each .01%) NET DECREASE						.0840	.1959
NET AMOUNT OF ADJUSTMENT						PLUS	.0005
						MINUS	.0840
ADJUSTED BASE PRICE – PER L.D.T. UNIT							2.2165

LONG WET TONS		MOISTURE CONTENT		LONG DRY TONS		% Mn.		L.D.T. UNITS		ADJUSTED BASE PRICE		PAYMENT
62.6339	-	2.2798	=	60.3541	X	42.00	=	2534.8722	X	2.22	=	$5,627.42

ACCEPTANCE

RECEIVED AND ACCEPTED BY GENERAL SERVICES ADMINISTRATION AT

BY (Type name): F. W. Witt
SIGNATURE:
TITLE: Coordinator of Sales

FOR USE OF PRODUCER ONLY

INVOICE

TO: General Services Administration
REGION NUMBER:
CITY AND STATE:

FOR [ ] MANGANESE ORE [ ] CONCENTRATES delivered as indicated above
$ 5,627.42

I certify that the above bill is correct and just and that payment therefor has not been received. The producer warrants that said material was mined in the Continental United States.

PRODUCER (Type name): Old Dominion Manganese Co., Inc.
DATE: June 17, 1954
BY: [signature]
TITLE: Agent

GSA-WASH DC 53-3922

GSA FORM 1037 September 1952

Form approved by Comptroller General, U.S. September 26, 1952

GENERAL SERVICES ADMINISTRATION
DOMESTIC MANGANESE PURCHASE PROGRAM
(CARLOAD LOTS)

ACCEPTANCE AND INVOICE

DATE: June 14, 1954

ACCEPTANCE NUMBER: 299

ISSUED UNDER CERTIFICATE OF AUTHORIZATION NUMBER: Certificate # 3-6 GS-00P-7368(SCM)

TO
Old Dominion Manganese Co. Inc.
c/o J. B. Lewis, 52 Wall St., Room 2100
New York 5, N. Y.

Subject to the terms and conditions of the Manganese Regulation establishing the Government's Purchase Program for Domestic Manganese Ore or Concentrates in carload lots, the Government accepts 58.9285 long tons (wet basis) of [X] Manganese Ore [ ] Concentrates delivered f.o.b. by you at Star Tannery, Va. car, consigned to U.S. Naval Storehouse, at Point Pleasant, W. Va. on ~~BL~~ No. B&O 262009. Such material has a moisture content of 5.17 % and analyses in a dry basis as follows:

	PERCENT
MANGANESE (Mn)	42.00
IRON (Fe)	7.20
SILICA (SiO_2) PLUS ALUMINA (Al_2O_3)	7.03
PHOSPHOROUS (P)	.232
COPPER PLUS LEAD PLUS ZINC (Cu + Pb + Zn)	.20

EVALUATION AND SETTLEMENT DATA

	DOLLARS
BASE PRICE - PER L.D.T. UNIT	2.30

PREMIUMS	DIFFERENCE		DOLLARS		DOLLARS
Mn ABOVE 48%	.0000	X	.005	=	.0000
Fe BELOW 6%	.0000	X	.005	=	.0000

	DOLLARS
NET INCREASE	.0000

PENALTIES	DIFFERENCE		DOLLARS		DOLLARS
Mn BELOW 48% TO AND INCLUDING 44%	4.0000	X	.01	=	.0400
Mn BELOW 44% TO AND INCLUDING 40%	2.0000	X	.015	=	.0300
Fe ABOVE 6% TO AND INCLUDING 8%	1.2000	X	.01	=	.0120
Fe ABOVE 8% TO AND INCLUDING 16%	.0000	X	.0075	=	.0000
SiO_2 + Al_2O_3 ABOVE 11% TO AND INCLUDING 15%	.0000	X	.01	=	.0000
P ABOVE 0.12% TO AND INCLUDING 0.30%	11.2	X	.0033	=	.0373

(1/3¢ for each .01%) NET DECREASE .1193

		DOLLARS
NET AMOUNT OF ADJUSTMENT	PLUS	.0000
	MINUS	.1193
ADJUSTED BASE PRICE - PER L.D.T. UNIT		2.1807

LONG WET TONS		MOISTURE CONTENT		LONG DRY TONS		% Mn.		L.D.T. UNITS		ADJUSTED BASE PRICE		PAYMENT
58.9285	-	3.0466	=	55.8319	X	42.00	=	2347.0398	X	2.18	=	$5,116.55

ACCEPTANCE

RECEIVED AND ACCEPTED BY GENERAL SERVICES ADMINISTRATION AT

BY (Type name)	SIGNATURE	TITLE

FOR USE OF PRODUCER ONLY

INVOICE

TO	REGION NUMBER	CITY AND STATE
General Services Administration		

FOR [ ] MANGANESE ORE [ ] CONCENTRATES delivered as indicated above $5,116.55

I certify that the above bill is correct and just and that payment therefor has not been received. The producer warrants that said material was mined in the Continental United States.

PRODUCER (Type name)	DATE
Old Dominion Manganese Co., Inc.	June 17, 1954
BY (Signature) G C Fleming	TITLE: Agent

GSA-WASH DC 53-3922

GSA FORM 1037
September 1952

Form approved by Comptroller General, U.S. September 26, 1952

GENERAL SERVICES ADMINISTRATION
DOMESTIC MANGANESE PURCHASE PROGRAM
(CARLOAD LOTS)

ACCEPTANCE AND INVOICE

DATE: June 21, 1954

ACCEPTANCE NUMBER: 312

TO: Old Dominion Manganese Co. Inc.
Room 2500, Girard Trust Bldg.
Philadelphia, Pa.

ISSUED UNDER CERTIFICATE OF AUTHORIZATION NUMBER: Certificate # 3-6 GS-OOP-7368(SCM)

Subject to the terms and conditions of the Manganese Regulation establishing the Government's Purchase Program for Domestic Manganese Ore or Concentrates in carload lots, the Government accepts 66.5178 long tons (wet basis) of [X] Manganese Ore [ ] Concentrates delivered f.o.b. by you at Star Tannery, Va. car, consigned to U. S. Naval Storehouse, at Point Pleasant, W. Va. on ~~B/L~~ No. ~~B.O~~ 254440. Such material has a moisture content of 3.86 % and analyses in a dry basis as follows:

	PERCENT
MANGANESE (Mn)	42.63
IRON (Fe)	7.50
SILICA (SiO_2) PLUS ALUMINA (Al_2O_3)	10.32
PHOSPHOROUS (P)	.254
COPPER PLUS LEAD PLUS ZINC (Cu + Pb + Zn)	.15

EVALUATION AND SETTLEMENT DATA

	DOLLARS
BASE PRICE – PER L.D.T. UNIT	2.30

PREMIUMS	DIFFERENCE		DOLLARS		DOLLARS
Mn ABOVE 48%	.0000	X	.005	=	.0000
Fe BELOW 6%	.0000	X	.005	=	.0000

	DOLLARS
NET INCREASE	.0000

PENALTIES	DIFFERENCE		DOLLARS		DOLLARS
Mn BELOW 48% TO AND INCLUDING 44%	4.0000	X	.01	=	.0400
Mn BELOW 44% TO AND INCLUDING 40%	1.3700	X	.015	=	.0205
Fe ABOVE 6% TO AND INCLUDING 8%	1.5000	X	.01	=	.0150
Fe ABOVE 8% TO AND INCLUDING 16%	.0000	X	.0075	=	.0000
SiO_2 + Al_2O_3 ABOVE 11% TO AND INCLUDING 15%	.0000	X	.01	=	.0000
P ABOVE 0.12% TO AND INCLUDING 0.30%	13.4	X	.0033	=	.0446

(1/3¢ for each .01%)

	DOLLARS
NET DECREASE	.1201
NET AMOUNT OF ADJUSTMENT PLUS	.0000
NET AMOUNT OF ADJUSTMENT MINUS	.1201
ADJUSTED BASE PRICE – PER L.D.T. UNIT	2.1799

LONG WET TONS		MOISTURE CONTENT		LONG DRY TONS		% Mn.		L.D.T. UNITS		ADJUSTED BASE PRICE		PAYMENT
66.5178	–	2.5675	=	63.9503	X	42.63	=	2726.2012	X	2.18	=	$5,943.12

ACCEPTANCE

RECEIVED AND ACCEPTED BY GENERAL SERVICES ADMINISTRATION AT

BY (Type name): F. W. Witt
SIGNATURE:
TITLE: Coordinator of Sales

FOR USE OF PRODUCER ONLY

INVOICE

TO: General Services Administration
REGION NUMBER:
CITY AND STATE:

FOR [ ] MANGANESE ORE [ ] CONCENTRATES delivered as indicated above $ 5,943.12

I certify that the above bill is correct and just and that payment therefor has not been received. The producer warrants that said material was mined in the Continental United States.

PRODUCER (Type name): Old Dominion Manganese Co. Inc.
DATE: June 24 1954
BY (Signature): R. C. Fleming
TITLE: Agent

GSA-WASH DC 53-3922

GSA FORM 1037
September 1952

8

Form approved by Comptroller General, U.S. September 26, 1952

GENERAL SERVICES ADMINISTRATION
DOMESTIC MANGANESE PURCHASE PROGRAM
(CARLOAD LOTS)

ACCEPTANCE AND INVOICE

DATE: June 21, 1954

ACCEPTANCE NUMBER: 313

ISSUED UNDER CERTIFICATE OF AUTHORIZATION NUMBER: Certificate # 3-6
GS-[illegible]-7363(S04)

TO
Old Dominion Manganese Co. Inc.
Room 2500, Girard Trust Bldg.
Philadelphia, Pa.

Subject to the terms and conditions of the Manganese Regulation establishing the Government's Purchase Program for Domestic Manganese Ore or Concentrates in carload lots, the Government accepts 52.8125 long tons (wet basis) of [X] Manganese Ore [ ] Concentrates delivered f.o.b. by you at Star Tannery, Va. CRP, consigned to U. S. Metal Storehouse, at Point Pleasant, W. Va. on B/L No. B&O 250302. Such material has a moisture content of 3.00 % and analyses in a dry basis as follows:

	PERCENT
MANGANESE (Mn)	41.16
IRON (Fe)	6.60
SILICA (SiO_2) PLUS ALUMINA (Al_2O_3)	10.22
PHOSPHOROUS (P)	.268
COPPER PLUS LEAD PLUS ZINC (Cu + Pb + Zn)	.11

EVALUATION AND SETTLEMENT DATA

	DOLLARS
BASE PRICE - PER L.D.T. UNIT	2.30

PREMIUMS	DIFFERENCE		DOLLARS		DOLLARS
Mn ABOVE 48%	.0000	X	.005	=	.0000
Fe BELOW 6%	.0000	X	.005	=	.0000

	DOLLARS
NET INCREASE	.0000

PENALTIES	DIFFERENCE		DOLLARS		DOLLARS
Mn BELOW 48% TO AND INCLUDING 44%	4.0000	X	[illegible]	=	.0400
Mn BELOW 44% TO AND INCLUDING 40%	2.8400	X	.015	=	.0426
Fe ABOVE 6% TO AND INCLUDING 8%	2.0000	X	.01	=	.0200
Fe ABOVE 8% TO AND INCLUDING 16%	.6000	X	.0075	=	.0045
SiO_2 + Al_2O_3 ABOVE 11% TO AND INCLUDING 15%	.0000	X	.01	=	.0000
P ABOVE 0.12% TO AND INCLUDING 0.30%	14.8	X	.0033	=	.0493
(1/3¢ for each .01%)				NET DECREASE	.1564

NET AMOUNT OF ADJUSTMENT	PLUS	.0000
	MINUS	.1564
ADJUSTED BASE PRICE - PER L.D.T. UNIT		2.1436

LONG WET TONS		MOISTURE CONTENT		LONG DRY TONS		% Mn.		L.D.T. UNITS		ADJUSTED BASE PRICE		PAYMENT
52.8125	-	1.5843	=	51.2282	X	41.16	=	2108.5527	X	2.14	=	$4,512.30

ACCEPTANCE

RECEIVED AND ACCEPTED BY GENERAL SERVICES ADMINISTRATION AT

BY (Type name): R. W. Mitt
SIGNATURE:
TITLE: Coordinator of Sales

FOR USE OF PRODUCER ONLY

INVOICE

TO: General Services Administration
REGION NUMBER:
CITY AND STATE:

FOR [ ] MANGANESE ORE [ ] CONCENTRATES delivered as indicated above $4,512.30

I certify that the above bill is correct and just and that payment therefor has not been received. The producer warrants that said material was mined in the Continental United States.

PRODUCER (Type name): Old Dominion Manganese Co. Inc.
DATE: June 24, 1954
BY (Signature): R. C. Flemming
TITLE: Agent

GSA FORM 1097
September 1952

Form approved by Comptroller General, U.S. September 26, 1952

GENERAL SERVICES ADMINISTRATION
DOMESTIC MANGANESE PURCHASE PROGRAM
(CARLOAD LOTS)

ACCEPTANCE AND INVOICE

DATE: June 28, 1954

ACCEPTANCE NUMBER: 327

ISSUED UNDER CERTIFICATE OF AUTHORIZATION NUMBER: Certificate # 3-6 GS-00P-7368(SCM)

TO
Old Dominion Manganese Company, Inc.
Room 2500, Girard Trust Bldg.
Philadelphia, Penn.

Subject to the terms and conditions of the Manganese Regulation establishing the Government's Purchase Program for Domestic Manganese Ore or Concentrates in carload lots, the Government accepts 53.0803 long tons (wet basis) of [ ] Manganese Ore [ ] Concentrates delivered f.o.b. by you at Star Tannery, Vacor, consigned to U.S. Naval Storehouse, at Point Pleasant, W. Va. on B/L No. B&O 251350. Such material has a moisture content of 6.22 % and analyses in a dry basis as follows:

	PERCENT
MANGANESE (Mn)	43.47
IRON (Fe)	6.80
SILICA (SiO_2) PLUS ALUMINA (Al_2O_3)	6.32
PHOSPHOROUS (P)	.258
COPPER PLUS LEAD PLUS ZINC (Cu + Pb + Zn)	.19

EVALUATION AND SETTLEMENT DATA

	DOLLARS
BASE PRICE - PER L.D.T. UNIT	2.30

PREMIUMS	DIFFERENCE		DOLLARS		DOLLARS
Mn ABOVE 48%	.0000	X	.005	=	.0000
Fe BELOW 6%	.0000	X	.005	=	.0000

	DOLLARS
NET INCREASE	.0000

PENALTIES	DIFFERENCE		DOLLARS		DOLLARS
Mn BELOW 48% TO AND INCLUDING 44%	4.0000	X	.01	=	.0400
Mn BELOW 44% TO AND INCLUDING 40%	.5300	X	.015	=	.0079
Fe ABOVE 6% TO AND INCLUDING 8%	.8000	X	.01	=	.0080
Fe ABOVE 8% TO AND INCLUDING 16%	.0000	X	.0075	=	.0000
SiO_2 + Al_2O_3 ABOVE 11% TO AND INCLUDING 15%	.0000	X	.01	=	.0000
P ABOVE 0.12% TO AND INCLUDING 0.30%	13.8	X	.0033	=	.0460
(1/3¢ for each .01%)				NET DECREASE	.1019

NET AMOUNT OF ADJUSTMENT	PLUS	.0000
	MINUS	.1019
ADJUSTED BASE PRICE - PER L.D.T. UNIT		2.1981

LONG WET TONS		MOISTURE CONTENT		LONG DRY TONS		% Mn.		L.D.T. UNITS		ADJUSTED BASE PRICE		PAYMENT
53.0803	-	3.3015	=	49.7788	X	43.47	=	2163.6844	X	2.20	=	$4,760.55

ACCEPTANCE

RECEIVED AND ACCEPTED BY GENERAL SERVICES ADMINISTRATION AT

BY (Type name)	SIGNATURE	TITLE
F. W. Witt		Coordinator of Sales

FOR USE OF PRODUCER ONLY

INVOICE

TO	REGION NUMBER	CITY AND STATE
General Services Administration		

FOR [ ] MANGANESE ORE [ ] CONCENTRATES delivered as indicated above — $4,760.55

I certify that the above bill is correct and just and that payment therefor has not been received. The producer warrants that said material was mined in the Continental United States.

PRODUCER (Type name)	DATE
Old Dominion Manganese Co. Inc.	June 30, 1954
BY (Signature): R.C. Fleming	TITLE: Agent

GSA-WASH DC 53-3922

GSA FORM 1037
September 1952

6

Form approved by Comptroller General, U.S. September 26, 1952

GENERAL SERVICES ADMINISTRATION
DOMESTIC MANGANESE PURCHASE PROGRAM
(CARLOAD LOTS)

ACCEPTANCE AND INVOICE

DATE: June 28, 1954

ACCEPTANCE NUMBER: 328

ISSUED UNDER CERTIFICATE OF AUTHORIZATION NUMBER: Certificate # 3-6 GS-00P-7368 (SOM)

TO
Old Dominion Manganese Co. Inc.
Room 2500, Girard Trust Bldg.
Philadelphia, Pa.

Subject to the terms and conditions of the Manganese Regulation establishing the Government's Purchase Program for Domestic Manganese Ore or Concentrates in carload lots, the Government accepts 53.1696 long tons (wet basis) of [X] Manganese Ore [ ] Concentrates delivered f.o.b. by you at Star Tannery, Va., _____, consigned to U. S. Naval Storehouse, at Point Pleasant, W. Va. on [X] No. B&O 350082. Such material has a moisture content of 6.83 % and analyses in a dry basis as follows:

	PERCENT
MANGANESE (Mn)	42.00
IRON (Fe)	7.00
SILICA (SiO_2) PLUS ALUMINA (Al_2O_3)	6.71
PHOSPHOROUS (P)	.258
COPPER PLUS LEAD PLUS ZINC (Cu + Pb + Zn)	.17

EVALUATION AND SETTLEMENT DATA

	DOLLARS
BASE PRICE - PER L.D.T. UNIT	2.30

PREMIUMS	DIFFERENCE		DOLLARS		DOLLARS
Mn ABOVE 48%	.0000	X	.005	=	.0000
Fe BELOW 6%	.0000	X	.005	=	.0000

	DOLLARS
NET INCREASE	.0000

PENALTIES	DIFFERENCE		DOLLARS		DOLLARS
Mn BELOW 48% TO AND INCLUDING 44%	4.0000	X	.01	=	.0400
Mn BELOW 44% TO AND INCLUDING 40%	2.0000	X	.015	=	.0300
Fe ABOVE 6% TO AND INCLUDING 8%	1.0000	X	.01	=	.0100
Fe ABOVE 8% TO AND INCLUDING 16%	.0000	X	.0075	=	.0000
SiO_2 + Al_2O_3 ABOVE 11% TO AND INCLUDING 15%	.0000	X	.01	=	.0000
P ABOVE 0.12% TO AND INCLUDING 0.30%	13.8	X	.0033	=	.0460

(1/3¢ for each .01%)

		DOLLARS
NET DECREASE		.1260
NET AMOUNT OF ADJUSTMENT	PLUS	.0000
	MINUS	.1260
ADJUSTED BASE PRICE - PER L.D.T. UNIT		2.1740

LONG WET TONS		MOISTURE CONTENT		LONG DRY TONS		% Mn.		L.D.T. UNITS		ADJUSTED BASE PRICE		PAYMENT
53.1696	-	3.6314	=	49.5382	X	42.00	=	2080.6044	X	2.17	=	$4,514.91

ACCEPTANCE

RECEIVED AND ACCEPTED BY GENERAL SERVICES ADMINISTRATION AT

BY (Type name): F. W. Witt

SIGNATURE:

TITLE: Coordinator of Sales

FOR USE OF PRODUCER ONLY

INVOICE

TO: General Services Administration

REGION NUMBER:

CITY AND STATE:

FOR [ ] MANGANESE ORE [ ] CONCENTRATES delivered as indicated above $4,514.91

I certify that the above bill is correct and just and that payment therefor has not been received. The producer warrants that said material was mined in the Continental United States.

PRODUCER (Type name): Old Dominion Manganese Co. Inc.

DATE: June 30, 1954

BY (Signature): R. C. Fleming

TITLE: Agent

GSA-WASH DC 53-3922

GSA FORM 1037 September 1952

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

Department of the Interior
Defense Minerals Administration
RECEIVED
JUL 7 - 1954

July 6, 1954

Memorandum

To: George C. Selfridge, Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region VIII

Subject: Docket No. DMEA-2359 - (Manganese)
Old Dominion Manganese Co., Inc.
Mineral Ridge Mine, Shenandoah and
Frederick Counties, Virginia
Contract No. Idm-E374

Attached are the original and three copies of a field inspection report by B. G. Anderson, engineer, on the subject contract.

W. T. Millar

W. T. Millar

Attachments - 4

DMEA
Field Inspection Report
by
Barclay G. Anderson, Engineer
June 16, 1954

Defense Minerals Administration
RECEIVED
JUL 7 - 1954

Operator:	Old Dominion Manganese Co., Inc.
Address (Office of Pres.):	Room 2100, 52 Wall St., New York 5, N.Y.
Mine & Location:	Mineral Ridge Mine, Shenandoah and Frederick Counties, Virginia
Docket No:	DMEA-2359
Contract No.:	Idm-E374
Commodity:	Manganese
Total Cost:	$39,600.00
Government Participation:	75% - $29,700.00
Duration of Contract:	18 months - from July 29, 1952 to Jan. 29, 1954

This property was inspected on June 16, 1954 in company of Trice Carter, who is resident superintendent in charge. All of the surface workings were inspected and also the mill. Later the limited production records available in the mine office were inspected.

The only records in the mine office relating to recent production were carbon copies of Bills of Lading of cars shipped during the period from January 11, 1954 to June 12, 1954. A copy of this list is attached to this report.

Carter stated that some of this production came from the north end, from pits 1-4, inclusive, in the section in which DMEA has a royalty interest. However, there are no figures available at the mine office from which the segregation can be made. Such information is in Mr. R. C. Stephenson's office, Room 2500, Girard Trust Bldg., Philadelphia 2, Pa. Mr. Stephenson's title is Manager. //

Mining: The only mining that I observed was on the north end where a churn drill and 1 yard shovel were in operation. Both units are powered by gasoline engines.

The 6-inch churn drill holes are charged with black powder. The force of the explosion of the black powder has an heaving action which forces the broken rock fragments to the surface where the shovel can load them easily.

There is no underground work at present. Preparations are now underway to reopen the #6 horizon by cleaning out an old adit a short distance north of the concentrator. From the appearance of the portal, I judge that a considerable amount of caving has occurred in the old workings. Approximately 500 feet south of the mill and at approximately 50 feet lower elevation, a new adit has been collared. The purpose of this adit is to reach the ore which is believed to extend farther down the flank of the anticline. The management believes that there are two zones of enrichment in the Oriskany sandstone and that these zones converge and join near the top of the ridge.

Concentrator Operation: At present about two cars of concentrates are being produced, per week. Some of the ore is being mined in the north end of the ridge. The head feed amounts to about 20 tons/hr. from which about 1½ tons of concentrates are produced. The ratio of concentration varies from 10-15 tons of crude ore to 1-ton of concentrates.

The concentrates now produced contain +40 percent manganese and do not average over 0.30 percent phosphorus.

Two concentrating tables have been added to the mill circuit within recent months to treat the -6 mesh material. Prior to the installation of the tables the -6 mesh material was stockpiled. It is now being feed back into the circuit in varying amounts but no definite figures as to the tonnage were available at the mine.

A scalping screen to remove the large pieces of waste has been put in at the head of the circuit.

The heavy-media unit in the circuit uses ferrosilicon as the heavy media which is recovered by a magnet and returned to the circuit. The density of the solution is about 2.8 - 2.9.

A considerable stockpile of crude ore has been accumulated in recent months at the mill. This stockpile is now being depleted at a more rapid rate than formerly because of the decreasing production from the north end of the ridge.

Concentrations produced from certain areas run low in phosphorus. These concentrates are stockpiled and are used for blending with concentrates containing a higher percentage of phosphorus. Carter stated that by this method they were able to stay below the maximum allowable limit of 0.3 percent phosphorus in their shipments.

Operations are carried on in two ten-hour shifts. About 18 men are employed, exclusive of supervision and the laboratory.

The concentrates are hauled to the rail siding at Strasburg, Virginia, by a trucking contractor for $1.00/ton.

B. G. Anderson

College Park, Md.
July 5, 1954

DMEA-2359
Defense Minerals Administration
RECEIVED
JUL 7 - 1954

The following information on shipments of concentrates made this year was obtained from inspection of the carbon copies of the Bills of Lading in the mine office. No assays were on file at the mine office for these cars.

Cars No. + RR		Date	Weight (lbs.)
B & O	#350082	June 12, 1954	119,100
"	26773	June 12, 1954	118,900
"	250302	June 5, 1954	118,300
"	26440	June 5, 1954	149,000
"	252060	April 21, 1954	134,100
"	264302	April 21, 1954	127,900
"	262009	May 28, 1954	132,000
"	250461	May 28, 1954	140,300
"	552877	May 21, 1954	134,000
"	262221	May 21, 1954	131,900
"	97875	March 23, 1954	109,400
"	251887	March 23, 1954	132,300
"	554121	March 23, 1954	127,900
N.Y.C.	693306	Jan. 11, 1954	106,000
L.T.	2598	Jan. 11, 1954	108,500
		15 cars	1,889,600 lbs.

Hand check on Royalties due.

yes, comma should be a decimal point

842,8099 wet long tons

(Consigned to U. S. Naval Warehouse - Point Pleasant, West Virginia)

B. G. Anderson

S. A. Rpt
6/30/54

400

Operator:	Old Dominion Manganese Co., Inc.
Address:	Room 2100, 52 Wall St., New York 5, N.Y.
Mine & Location:	Mineral Ridge Mine, Star Tannery, Virginia Shenandoah & Rockingham Counties, Virginia
Docket No.:	MMA-2359
Contract No.:	I6n-1376
Commodity:	Manganese
Date of Certification:	April 28, 1954

This operation is shipping manganese concentrates. Royalty payments are expected within three weeks.

400

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

Memorandum June 2 , 1954

To: W. T. Millar

From: R. L. Burmeister

Subject: DMEA Contract E374, Old Dominion Manganese Co.

WSM

After having received the copy of our letter of June 23 to Mr. Lewis, Mr. R. C. Stephenson, Mgr. of the subject property, called at this office and talked to me.

Mr. Stephenson says that the company believes that they do not owe royalties to the Government because the operation is not making a profit. He also stated that earlier in the operation the ore had been much higher grade than lately and suggested that it would be better to start royalty payments now rather than from the starting date of the contract. It was pointed out that the reasoning was not logical.

Answering the question as why this office had received no communication, settlement sheets or royalty payments since issuance of the Certification, Mr. Stephenson said that they had probably been negligent. He further stated that his own company, which manages the mine, was loaning Old Dominion money for operations. I stated that it would seem that they are operating partially with Government funds and also that if profit cannot be made why is his company loaning Old Dominion money.

Mr. Stephenson was asked if he would at this time dictate a letter covering his statements. This he agreed to do but later decided not to. He was informed that the position this office took was that royalties from production were overdue and should be made under the contract. Mr. Stephenson agreed to write a letter to the Executive Officer tomorrow, July 30, regarding the Operator's stand on royalty payments. He also is to take care of the following items in his letter. A typed copy of the following was given Mr. Stephenson:

State why the Old Dominion Mananese Co. does not believe a Certificate of Discovery or Development was justified and state what the company expects to do about it.

Include a record of cars, tonnages, assays and value received for shipments since Sept. 4, 1953. State that photostatic copies of all settlement sheets on ore shipped since Sept. 4, 1953 will be made and sent to this office immediately.

State what you can regarding the percentage of tons of ore production as well as percentage of concentrates came from ground in which the Government has an interest.

State whether the Company has set aside the percentage of sales value due the Government and why the purchaser has not been notified to withhold the Government's share.

cc: Mr. Selfridge, Chrm., Oper. Comm. - 2
DMEA Files - 2

H. L. Burmeister

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

400

June 23, 1954

Mr. John B. Lewis, President
Old Dominion Manganese Co., Inc.
Room 2107, 52 Wall Street
New York 5, N. Y.

Subj: Docket No. DMA-2359 (Manganese)
Contract No. Ldm-1374

WSM

Dear Mr. Lewis:

Your attention is called to the letter sent you by Mr. C. O. Ittendorf, Administrator, DMEA, dated April 29, 1954, relating to royalty payments due the Government on production under the subject contract.

In the Final Report on this contract, the mine manager, Mr. Robert C. Stephenson, includes a single settlement sheet covering 10 cars of manganese concentrate totaling 204.83 long tons, as shipped between June 15, 1953 and September 1, 1953, all produced from the area covered by the contract.

On January 25, 1954, Mr. Stephenson reported to Mr. H. L. Burmeister that there had been shipped between January 1, 1953 and January 1, 1954, a total of approximately 1070 long tons of concentrate which is subject to royalty payments.

During a visit to the mine this month on June 16 by Mr. H. G. Anderson, a Bureau of Mines engineer, it was learned that 14 cars of concentrates totaling 842.31 long tons were shipped between the dates January 14, 1954 and June 12, 1954.

Royalty payments are due the Government upon sale of production and are computed upon the net amount received from the purchaser. Your attention is called particularly to the third paragraph of Mr. Ittendorf's letter, which states that the Operator should advise the purchaser to deduct the royalties due the Government on each shipment and forward payment by check made in favor of the Treasurer of the United States direct to the Executive Officer at College Park, Maryland.

Please inform this office why no data covering shipments of concentrates have been reported since September 1, 1953 and why no royalty payments have been submitted.

WTM:HLBurmeister:rwa

copy for Mr. RCStephenson, Mgr.
Rm 2500, Girard Tr. Bldg.
Phila. 2, Pa.
GeoCSelfridge, Chrm. - 4
Oper. Comm., DMEA
DMEA Files - 2

Very truly yours,

W. T. M.

W. T. Millar, Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII

OLD DOMINION MANGANESE COMPANY
INCORPORATED
STAR TANNERY, VIRGINIA

Docket
Defense Minerals Administration
RECEIVED
MAY 19 1954

PLEASE REPLY TO:
ROOM 2100, 52 WALL STREET
NEW YORK 5, N. Y.
TEL: DIGBY 4-3644

May 18, 1954

WSM

Mr. C. O. Mittendorf, Administrator
United States Department of the Interior
Defense Minerals Exploration Administration
Washington 25, D. C.

Re: Docket No. DMEA 2359 - Manganese
Mineral Ridge mine
Shenandoah and Frederick Counties,
Virginia
Contract No. Idm-E374

Dear Mr. Mittendorf:

I wish to acknowledge receipt of your letter of April 29th.

We will be in touch with you as soon as I can take this up with our Manager, R. C. Stephenson, who has just returned from a West Coast trip.

Very truly yours,

John B. Lewis

President

JBL:s

400
Rutledge
Martin
Chambers
Deckoff
Pavlides
Hedges
Johnson

APR 29 1954

Mr. W. T. Millar, Executive Officer
DMEA Field Team, Region VIII
Bureau of Mines
Eastern Experiment Station
College Park, Maryland

Re: Docket No. DMEA 2359-Manganese
Old Dominion Manganese Co., Inc.
Mineral Ridge mine
Shenandoah and Frederick Counties,
Virginia
Contract No. Idm-E374

Dear Mr. Millar:

Enclosed is a copy of a "Certification of Discovery or Development" issued under the above-described contract.

The request in your memorandum dated September 30, 1953, that the Field Team's Interim Report dated August 13, 1953, be considered as the final report by the Field Team has been reviewed. As this Interim Report was prepared after completion of the exploration program carried out under the subject contract and contains all of the pertinent data, it has been accepted as the Field Team's final report.

Sincerely yours,

W. S. Martin
ACTING Chairman, Operating Committee (2/5)

Enclosure

APPROVED:

J. H. Hedges
Member, Bureau of Mines (2/5)

D. M. Larrabee
Member, Geological Survey (2/5)

cc: Docket
FT, Reg. 8
Oper. Committee
Adm. Reading File
Code 400 - Mr. Martin
Code 800 - Mr. Chambers
Code 110 - Mr. Johnson
J. H. Hedges, USBM
Gilbert DeHuff, USBM
T. P. Thayer, USGS
L. Pavlides, USGS

FARutledge/ls
4/26/54

R.C.S.

DOCKET

400

Rutledge
Martin
Chandler
Dethloff
Parlides
Hoffman
Hodges
Farrabee
H. Johnson

APR 29 1954

Mr. Irving Gumbel, Acting Director
Materials Division
Emergency Procurement Service
General Services Administration
Washington 25, D. C.

Re: Docket No. DMEA 2359 - Manganese
Old Dominion Manganese Co., Inc.
Mineral Ridge mine
Shenandoah and Frederick Counties,
Virginia
Contract No. Idm-K374

Dear Mr. Gumbel:

Enclosed is a copy of a "Certification of Discovery or Development" issued under the subject contract.

Contract No. Idm-K374 was executed July 29, 1952, to cover a 2-stage exploration program. Expenditures up to $39,600.00 were authorized, of which the Government's share at 75 percent was $29,700.00. The project was terminated by mutual consent after Stage I of the program was completed. The cost of the work completed was $6,177.22, of which the Government's share at 75 percent was $4,632.92.

The exploration program was designed to investigate the possible extensions of the manganese mineralization at the Mineral Ridge mine. Trenching and test pitting under the subject contract indicate that the mineralization extends approximately 1600 feet to the northeast but does not extend to the southwest.

The exploration work done under the contract was accomplished efficiently. However, the records were not well kept and most of the resulting data had to be compiled by the Government engineer.

Twenty four trenches were bulldozed and fifteen test pits were sunk during the exploration project. The Operator did not wish to rehabilitate the old No. 6 tunnel at his own expense. This was a prerequisite for the drifting under Stage II of the contract. Government participation in

R.C.S.

the rehabilitation costs was not allowed as this work lay within the area exempted from the land covered by Article 2 in the subject contract. Because the results of Stage I had indicated a significant discovery from which production may be made without further exploration, the contract was terminated by mutual agreement.

The exploration completed has revealed a substantial amount of manganese ore and furnished sufficient data to calculate ore reserves. The following estimates of reserves have been made:

	Operator (tons)	Field Team (tons)
Minable by Open cut Methods -	40,000 @ 15.9% Mn	36,500 @ 20.26% Mn
Total reserves		166,700 @ 20.26% Mn

The Field Team estimated that 22 percent, or 36,500 tons, may be mined by open-cut workings.

Sincerely yours,

C. O. Mittendorf

Administrator

Enclosure

Copy to: Docket
Field Team, Reg. 8
Operating Committee
Admin. Reading File
Code 400 Mr. Martin
Code 800 Mr. Chambers
Code 110 Mr. Johnson
J. H. Hedges, USBM
Gilbert DeHuff, USBM
T. P. Thayer, USGS
Louis Pavlides, USGS

FARutledge/ls
4/26/54

DOCKET

Rutledge
Newton
Chandler
Deckert
Pavlides
Hoffhines
Hedges
Jarosek
Johnson

APR 29 1954

Mr. John B. Lewis, President
Old Dominion Manganese Company, Inc.
Room 2100, 52 Wall Street
New York 5, New York

Re: Docket No. DMEA 2359 - Manganese
Mineral Ridge mine
Shenandoah and Frederick Counties,
Virginia
Contract No. Idm-E374

Dear Mr. Lewis:

Transmitted herewith is a "Certification of Discovery or Development" issued under the subject contract executed July 29, 1952.

By the terms of the Exploration Project Contract and of the Certification, all production from the lands described in the subject 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 $4,632.92 is paid or until July 29, 1962, whichever occurs first.

Payments should be made to Mr. W. T. Millar, Executive Officer, DMEA Field Team, Region VIII, Bureau of Mines, Eastern Experiment Station, College Park, Maryland. Checks should be payable to the Treasurer of the United States. The purchaser should be advised to deduct the 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 copies of settlement sheets, showing quantity and grade of the manganese products sold, the name of the purchaser, and the price and charges certified to be correct by the purchaser.

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

Sincerely yours,

C. O. Mittendorf (for)
Administrator

Enclosure

R.C.S.

Copy to: Docket
Field Team, Region No. 8
Operating Committee
Admin. Reading File

Code 400 - Mr. Martin
Code 800 - Mr. Chambers
Code 110 - Mr. Johnson

J. H. Hedges, USBM
Gilbert DeHuff, USBM

T. P. Thayer, USGS
Louis Pavlides, USGS

Robert C. Stephenson, Manager
Old Dominion Manganese Co., Inc.
2500 Girard Trust Bldg.
Philadelphia 2, Pennsylvania

FARutledge/ls
4/26/54

400

Docket Copy

Rutledge
Martin
Dethloff
Parlidis

April 26, 1954

MEMORANDUM

To: Administrator, DMEA

From: Iron and Ferro-Alloys Division

Subject: Review of contract prior to certification of discovery
Docket No. DMEA 2359 - Manganese
Old Dominion Manganese Co., Inc.
Mineral Ridge mine
Shenandoah and Frederick Counties, Virginia
Contract No. Idm-E374

Operator: Old Dominion Manganese Company, Inc., a corporation duly organized and existing under and by virtue of the laws of the State of Delaware, Room 2100, 52 Wall Street, New York 5, New York.

Operator's property rights:

Owner of the Mineral Ridge mine composed of Tracts 1, 2, and 3 as set forth in Annex I. The subject contract, however, did not apply to the block of ground bounded by a vertical plane through the end of the north drift from the Number 6 Tunnel and a vertical plane through the end of the south drift from the Number 6 Tunnel, said planes to be at right angles to the strike of the ore zone. The approximate position of these boundary planes is shown by X-X and Y-Y on "Map of Mine of Hy-Grade Manganese Co., Inc., No. 7".

Contract: Dated July 29, 1952.

(a) Work authorized:

Stage I

Excavate 30 bulldozer trenches across the outcrop of the residual ore zone at 100-foot intervals northeast and southwest of the exempted area.

Sink 30 test pits in the above bulldozer trenches.

R.C.S.

STAGE II

Extend the No. 6 Tunnel level at either one or both ends an aggregate distance not to exceed 1,000 feet. Rehabilitation of the No. 6 Tunnel level, which is within the exempted area, is to be at the expense of the Operator.

(b) Estimated costs:

Agreed unit costs

Stage I		
30 bulldozer trenches @ $175.00	$5,250.00	
30 test pits @ $50.00	1,500.00	
		$6,750.00
Stage II		
1,000 feet of drifting @ $25.00		25,000.00

Total estimated costs

Stage I	$9,000.00	
Stage II	30,600.00	
Total Estimated Cost of Project		$39,600.00
Government's participation @ 75 percent		$29,700.00

(c) Amendments

None

(d) Work Completed:

Twenty-four bulldozer trenches and fifteen test pits were completed under Stage I. Fourteen of the trenches were spaced to the northeast of the old pit. All of these trenches with the exception of the N-9 exposed manganese mineralization. Trenching in the northeast direction was discontinued due to the large boulders of hanging-wall sandstone and the steepness of the hill which made trenching impractical. None of the trenches southwest of the old pit exposed ore.

Total Costs -	Trenching	$4,746.39
	Test pits	1,430.83
		$6,177.22

Government's participation @ 75% $4,632.92

(e) Date Completed:

Contract terminated by mutual consent September 4, 1953, after completion of Stage I.

(f) Audit Report of Review dated October 21, 1953.

Total accepted cost	$6,177.22
Government participation	4,632.92

(g) Certification of discovery being issued.

Comments:

Work under the subject contract was terminated by agreement upon the substantial completion of Stage I. The work under Stage I has indicated the occurrence of manganese of a grade and tonnage sufficient for certification of a discovery or development.

The Operator did not wish to rehabilitate at his sole expense the old No. 6 Tunnel. This was a prerequisite for the drifting under Stage II of the DMEA contract. Government participation in the rehabilitation costs was not allowed as this work lay within the area exempted from the land in Article 2 of the subject contract.

The exploration program was designed to investigate the possible extensions of the manganese mineralization at the Mineral Ridge mine. Trenching and test pitting under the contract indicate that the mineralization extends approximately 1600 feet to the northeast, but does not extend to the southwest.

The exploration work done under the contract was accomplished efficiently. However, the records were not well kept and most of the resulting data had to be compiled by the Government engineer.

The following estimates have been made for the ore reserves:

Operator's estimate

The Operator's estimate contains only that ore amenable to open-cut mining. The estimate is based on 1,650 linear feet of 15.9 percent manganese ore averaging 10.3 feet in width, dip of 40°, and an assumed economic limit of 40 feet on overburden (40 feet down dip to point with 40 feet overburden): 679,800 cubic feet.

40,000 tons using 17 cubic feet to the ton.

Assuming a ratio of ore to concentrates of 20:1, based on 1953 operating experience, this ore would yield 2,000 tons of manganese concentrates.

Field Team estimate

The ore estimated by the Field Team has been calculated on an ore body dipping 30 degrees and extending from the top of the test pits to a level 25 feet vertically below the No. 6 level. A factor of 13 cubic feet per ton was assumed in estimating the reserves.

The data obtained from channel sampling in the test pits indicate an ore body, in the section covered by the contract, with a strike length of 1,340 feet, a width of 10.7 feet, and an average manganese content of 19.2 percent. The 1,340-foot strike length extends from a point 90 feet southwest of the northeast face of the main old pit to a point 45 feet northeast of pit NP-10.

The Field Team has estimated that 166,700 tons of 20.26 percent manganese may be inferred as a result of the DMEA project. It is estimated that a maximum of 22 percent of the total, or 36,500 tons, may be mined by open-cut workings.

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

cc: Docket
Operating Committee
Code 400
Adm. Reading File

FARutledge/ls
4/26/54

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

Docket

RECEIVED

March 8, 1954

4/19/54

Memorandum

To: George C. Selfridge, Chairman, DMEA Operating Committee WSM

From: Executive Officer, DMEA Field Team, Region VIII

Subject: Docket No. DMEA-2359 - (Manganese)
Mineral Ridge Mine
Old Dominion Manganese Co., Inc.
Shenandoah & Frederick Counties, Virginia
Contract No. Idm-E374

Transmitted herewith are the original and two copies of the Final Report on the exploratory work conducted under the subject contract, prepared by the Operator.

The following are points mentioned for consideration:

1. Termination by Agreement signed, effective September 4, 1953.

2. September 30, 1953 - A request by the Field Team to consider our Interim Report of August 13, 1953 as our Final Report.

3. Auditor's Report of Review, October 21, 1953 with total accepted cost of $6,177.22 checks with our Interim Report of August 11, 1953 and also with the Operator's Final Report.

4. Our Interim Report recommended certification. //

W. T. Millar

W. T. Millar

Op. FINAL RPT.

Enclosures - 3

Reviewed by
DMEA OPERATING COMMITTEE
3-12-54
(date)

F I N A L R E P O R T

on

DOCKET DMEA-2359
CONTRACT Idm-E-374

OLD DOMINION MANGANESE CO., INC.
STAR TANNERY, VIRGINIA

by

Robert C. Stephenson, Geologist

Reviewed by
DMEA OPERATING COMMITTEE

3-12-54
(date)

FINAL REPORT
on
DOCKET DMEA-2359
CONTRACT Idm-E-374

OLD DOMINION MANGANESE CO., INC.
STAR TANNERY, VIRGINIA
by
Robert C. Stephenson, Geologist

SUMMARY

An exploration contract was granted Old Dominion Manganese Co. Inc. by the Federal Government through the Department of Interior in Docket DMEA-2359, Contract Idm-E-374 for the purpose of exploring the manganese reserves of Mineral Ridge lying in Frederick and Shenandoah Counties, Virginia. The project called for an exploration program with a budget of expenditures totaling $39,600.00, with 75% (not in excess of $29,700.00) of the accrued cost to be paid by the U. S. Government. A series of 24 prospect trenches and 15 test pits were completed in Stage I (surface) of the exploration contract at a cost of $6,177.22. Stage II of the exploration contract, which called for underground exploration by drifting, was not undertaken because of the excessive costs of rehabilitating the old underground workings to reach the virgin zones to be prospected under the contract. The contract was terminated as of September 4, 1953.

The DMEA exploration discovered no ore in 10 trenches and 1 test pit on the southern extension of Mineral Ridge. To the north of the old open pit, 14 DMEA prospect trenches and pits uncovered 1650 feet of manganese ore with an average thickness of 10.3 feet and manganese content of 15.9%. This prospecting is estimated to have developed a possible open pit ore reserve of 40,000 tons which might be expected to yield approximately 2,000 tons of concentrates upon milling, based on actual mill performance. Open pit mining results in considerable ore dilution.

From ore uncovered by DMEA exploration in the zone of pits N1-N3, 10 cars of concentrates were produced and shipped to the Government Stockpile between June 15 and September 4, 1953. Shipped during this period were 505.832 long dry tons of manganese concentrates averaging 43.119770% Mn.

INTRODUCTION

Mineral Ridge, a manganese deposit which has been worked discontinuously since 1834, lies in the Cedar Creek Valley, about 4 miles south of Star Tannery in Frederick and Shenandoah Coun-

ties, Virginia. Approximately 13,500 tons of manganese concentrates were produced and shipped from open pit and underground mining of the Mineral Ridge ore body in intermittent operations at the deposit between 1834 and 1932. The history and geology of the deposit are ably described by Stose & Miser (1922) and Monroe (1942). The deposit has also been described in unpublished reports by Grasty (1927) and Rukeyser (1952).

On July 29, 1952, an exploration project contract was negotiated between the U. S. Government and the Old Dominion Manganese Co. Inc. for the purpose of exploring the Mineral Ridge ore body. The contract schedule and budget is summarized below:

STAGE I - Time Schedule 0-3 months

Budgeted Costs -

30 bull-dozer trenches @ $175 each	$5,250.00
30 test pits @ $ 50 each	1,500.00
Supervision, analyst, consultant	1,900.00
Sampling equipment & assay supplies	100.00
Contingencies	250.00
BUDGET - STAGE I	$9,000.00

STAGE II - Time Schedule 4-12 months

Budgeted Costs -

1000 feet of drifting @ $25 per foot	$25,000.00
Supervision, analyst, consultant	5,100.00
Sampling equipment & assay supplies	100.00
Contingencies	400.00
BUDGET - STAGE II	$30,600.00
TOTAL ESTIMATED COST OF PROJECT	$39,600.00
GOVERNMENT PARTICIPATION @ 75%	$29,700.00

Stage I exploration under terms of the exploration contract began on October 2, 1952, and was completed in December 1952. Under the supervision of Mr. Harry L. Burmeister, DMEA Field Team, 14 bull-dozer trenches and prospect pits (N1-N14) were authorized completed in the ore zone spaced at approximately 100-foot intervals northward along the strike of the ore from the north end of the old open pit. On the southward extension of the Mineral Ridge, 10 trenches (S1-S10) and 1 test pit were authorized and completed. The ore zone was sampled where encountered by Trice Carter, Superintendent, acting on instructions of Mr. Burmeister. Analyses were completed in the company laboratory by Mrs. Mable Carter, Analyst. Results of this exploratory work are discussed later under DMEA EXPLORATION PROJECT.

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1038.4
Approval expires 6-30-53.
Defense Minerals Administration
RECEIVED
MAR 5 1954

OPERATOR'S MONTHLY REPORT AND VOUCHER

SUMMARY REPORT

~~Month of~~ ----------, ~~195~~--- Docket No. DMEA 2359 Contract No. Idm-E-374

Operator's Name OLD DOMINION MANGANESE COMPANY, INC. Minerals Manganese

Address Star Tannery, Virginia

Contract Amount, $ 39,600 Government Participation: 75 % Amount, $ 29,700.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
Stage 1	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling						
Bulldozing Trenches	None	$4,200.00	$4,200.00			
Crosscutting						
Drifting						
Test Pits	None	750.00	750.00			
(2) Labor and Supervision:						
Labor Assayer	None	214.00	214.00			
Supervision	None	740.00	740.00			
Technical Services Consult.	None	175.00	175.00			
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
Laboratory Supplies	None	46.50	46.50			
(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	None	42.93	42.93			
Liability Insurance	None	8.79	8.79			
(8) Contingencies (specify):						
TOTALS		$6,177.22	$6,177.22			

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

Date ---------- *Payee ----------

Per ---------- Title ----------

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

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

(Instructions on reverse)

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

$----------

Signature ----------
(Authorized Certifying Officer)

Date ---------- Vou. No. ----------
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

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

Signature ..... Title ..... Date .....

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature ..... Title ..... Date .....

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GPO 83-38476

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.1
Approval expires 6-30-53.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
8 - 1954

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

SUMMARY REPORT

~~Month of ---------- 195--~~ Docket No. DMEA 2359 Contract No. Idm-E-374

Operator's Name OLD DOMINION MANGANESE COMPANY, INC. Minerals Manganese

Address STAR TANNERY, VIRGINIA

OPERATION Stage 1	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 Dozer	1	None		$4,746.39	24	197.76	30	212.50
Test Pits	1	None		1,430.83	15	95.39	30	90.83
Roads and Trails								
TOTAL DISTRIBUTED COSTS		None		6,177.22				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased					Stage 1			$ 9,000.
Initial Rehabilitation and Repairs					Stage 2			30,600.
New Buildings, Improvements, etc.								
TOTAL COSTS								$39,600.

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 ---------- Operator ----------

Per ---------- Title ----------

REMARKS:

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

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

GPO 83-38475

Stage II of the exploration contract called for the driving of 1000 feet of exploratory drifts northward and southward from the extremities of the drifts of the old No. 6 level of the HyGrade Manganese Company. Stage II exploration was not carried out as originally proposed because the cost of rehabilitating No. 6 drift, an expense to be borne by Old Dominion Manganese Co. Inc. without Government aid, was believed to be excessive. Furthermore, this rehabilitation would have been dangerous for workmen, with uncertain risks of time and money. It is probable that underground exploratory drifts will be driven at a new and somewhat lower level than the abandoned, caved, No. 6 level.

The Exploration Project Contract No. Idm-E-374, Docket No. DMEA-2359, was terminated by mutual agreement on September 4, 1953. A financial summary of the project is present on accompanying copies of the forms MF-104 and MF-104A.

G E O L O G Y

As previously mentioned, the geology of the Cedar Creek Valley deposits, including the Mineral Ridge deposit, is described by Stose & Miser (1922) and Monroe (1942). Therefore, only a few of the more salient features of the ore occurrence will be here repeated.

The manganese mineralization of the Mineral Ridge ore deposit occurs as fracture fillings and replacement bodies in chert, clay, and to a lesser extent sandstone lenses of the New Scotland formation of Devonian age, approximately 70-80 feet stratigraphically below the Oriskany sandstone. The rocks in which the ore occurs are deeply-weathered and the mineralization is the result of residual weathering.

Mineral Ridge is an elongated, low ridge with a maximum relief of approximately 300 feet. The long axis of the ridge trends about N 30°E and is parallel to the strike of the underlying bedrock, with the massive Oriskany sandstone member capping the ridge along much of its length. The ore zone crops along the northwest slope of the hill and dips to the southeast beneath the overlying Oriskany sandstone at an average angle of 30°-50°. The ore zone dips at an angle which is steeper than the east slope of Mineral Ridge, so that the zone is buried under progressively deeper cover away from the outcrop.

The most of the ore occurs in a massive chert zone which ranges from 0 to 20 feet thick and averages approximately 7 feet in thickness, and mineralization is definitely related to the degree and nature of deformation of this chert zone. The chert is observed to pinch and swell as it is traced along the strike. Deformation of the chert zone has resulted in minor folds which have shattered these beds and produced dips ranging from nearly

horizontal to 60° and steeper. The mineralization is most intense in the more highly deformed and thicker chert zones. At the north end of the HyGrade Manganese Company open cut, folding produced a local reversal of dip in which the shattered chert was strongly mineralized.

The principal manganese mineral encountered in the Mineral Ridge deposit is pyrolusite, with considerable wad near the surface and minor amounts of manganite and psilomelane. Much of the pyrolusite is very finely crystalline and soft, to the extent that recovery in beneficiation is difficult. Brown oxides of iron are frequently associated with the manganese mineralization, particularly in the hanging wall zone. Phosphorus is present in the ore zone as wavellite in a few places and elsewhere associated with the gangue minerals.

To recapitulate: the manganese ore occurs principally in a massive chert zone. The intensity of the mineralization varies with the thickness and degree of deformation of the chert. The ore zone pinches and swells along the strike but appears to average about 7 feet in thickness.

M I N I N G

Prior to the beginning of the HyGrade Manganese Company development in 1920, most of the ore obtained from Mineral Ridge came from shallow shafts, tunnels, and pits opened at various points scattered along the crop of the ore over a distance of 2500 feet. The HyGrade Manganese Company developed extensive drifts and crosscuts in the ore zone on the No. 6 (elev. 1433') level and intersected the ore zone at 1350 feet in the No. 8 tunnel. This company later developed an open pit about 800 feet in length near the center of the hill. A total of 13,500 tons of manganese concentrates is reported to have been shipped from the property prior to the advent of current operations.

The Old Dominion Manganese Co. operations have been confined solely to surface, open pit mining. Removal of overburden has been accomplished by bull-dozers and a tractor-drawn carryall scraper. The ore zone is churn-drilled and blasted lightly to prepare the ore for loading by power shovel into trucks for movement to the mill.

In open pit mining of the Mineral Ridge ore body, difficulty has been experienced with contamination and dilution of the ore by unconsolidated barren material of the hanging wall and footwall that is virtually impossible to remove because of the relatively steep pitch of the ore zone. Lack of continuity of ore values along the strike of the ore zone due to pinching and swelling likewise presents a mining problem. It is considered that it will be unprofitable to remove more than 35 feet of overburden to expose ore for open pit mining, and then only if dilution of the ore can be successfully reduced.

M I L L I N G

The ore is trucked to the mill where it is reduced in a primary jaw crusher to 4" and passes into a log washer. From the log washer, the washed ore passes through a secondary cone crusher which reduces the material to 1½" and finer. Oversize from the 1/8" preparation screen is fed to a 5-foot heavy-media separatory cone; the undersize is classified and fed to concentrating tables. Concentrates are trucked to Strasburg, Virginia, for rail shipment.

D M E A E X P L O R A T I O N P R O J E C T

Twenty-four bull-dozer trenches and 15 test pits were completed along the strike of the ore zone under the terms of the DMEA exploration project. This surface work was designated as Stage I of the project. Stage II, underground exploration of the ore zone beyond the limits of the old No. 6 workings, was not undertaken because of the hazard and cost of rehabilitating the old workings. The area in the center of the hill, within the limits of lines drawn perpendicular through the extremities of the No. 6 level workings, was excluded from the DMEA contract.

On the south end of Mineral Ridge, 10 trenches and 1 prospect pit were completed without encountering ore. A trace of manganese staining was found in trenches 8, 9 and 10. In the opinion of the writer, the trenches were not sufficiently deep nor properly placed to definitely test the ore zone. It is an observed fact that on the steeper slopes at the extremities of the hill, the ore zone is obscured by a heavy talus mantle.

To the north of the HyGrade Manganese Company open pit, 14 trenches and test pits were completed in the ore zone under the project, and mineralization was found in each case.

The test pits were sampled by Trice Carter, Superintendent, Old Dominion Manganese Co. Inc., under instructions from H. L. Burmeister of the U. S. Bureau of Mines, and the results are summarized on page #6 under TEST PIT RESULTS.

The average thickness of the ore zone reported in the DMEA prospect pits was 10.3 feet in pits N1-N14. However, a total of 96 samples taken from the workings of No. 6 level indicated an average thickness of 7.7 feet. It is believed, therefore, that the ore thicknesses as reported in the DMEA project were in excess of the actual thickness.

In the opinion of the writer, the sampling of ores of the type found in Mineral Ridge could lead to erroneous results. The reason for this is that there is a wide difference in hardness between the soft manganese minerals and the hard, massive chert.

TEST PIT RESULTS

PROSPECT PIT	STRIKE DISTANCE	STRATIGRAPHIC THICKNESS	MANGANESE (Mn)
N1		12.2 feet	15.97%
N2		12.0	20.95
N3		11.5	37.16
N4		8.0	16.71
N5		8.7	11.00
N6		10.0	13.42
N7		12.2	22.15
N8		10.7	17.11
N9		10.5	20.07
N10		10.1	11.70
N1-10	1200 feet	10.6 feet	19.1%
N11		11.5	6.35
N12		8.0	6.06
N13		8.0	5.51
N14		11.0	9.71
N11-14	450 feet	9.6 feet	7.0%
N1-14	1650 feet	10.3 feet	15.9%

It is quite possible that, because of the difference in hardness, more manganese than chert is unavoidably collected in sampling the ore zone.

The dip of the beds as cross cut in the prospect pits was not recorded at the time of the sampling and was not available to the writer. However, subsequent removal of overburden between pits N1 and N9 showed the average dip to be approximately 35-40 degrees, with considerable variation. In the area from pits N1 to N4, the rocks dip at a low angle near the surface as a

result of a local fold or flexure, but the dip steepens to 35 and locally to 60 degrees as the ore zone is traced northward toward pit N10.

The DMEA prospecting of the Mineral Ridge ore body did not block out any proven ore reserves, nor, if we adhere to usual definition, were any reserves of probable ore delineated. The ore delineated by the DMEA project in prospect pits N1-N14 must be classed as possible, since the ore is exposed and samples on one side only.

Based on 1650 linear feet of ore averaging 10.3 feet in width and 15.9% in manganese with an average dip of 40 degrees to the southeast, and assuming an economic limit of 40 feet on overburden, a block of ore 1650 x 10.3 x 40* feet would be available. This block would contain a possible 679,800 cubic feet and 40,000 tons of 15.9% Mn ore. Assuming a ratio of ore to concentrates of 20:1, based on 1953 operating experience, this ore would yield 2,000 tons of manganese concentrates. The quantity of ore and the resulting concentrates would be reduced about 25% if the average thickness observed in the old underground workings is applied.

In summary, the DMEA prospect pits indicated possible ore reserves for open pit mining of about 40,000 tons which could be expected to yield 2,000 tons of manganese concentrates. Ore reserves available to underground mining were not indicated by the limited scope of Stage I prospecting.

S H I P M E N T S

At the suggestion of Mr. H. L. Burmeister, a record of shipments made by the Old Dominion Manganese Co. Inc. prior to the termination date of the DMEA contract on September 4, 1953, is herein included.

Four cars of concentrates were produced from ore mined in the old HyGrade Manganese open pit (not DMEA ground) and shipped prior to June 1, 1953. Mining on DMEA ground between the north end of the old open pit and prospect pit N3 began in mid-June. Ten cars of ore were produced and shipped from ore mined in this zone between June 15 and September 4. This lot of ore totaled 505.832 long dry tons, and payment on all cars is included on a single General Services Administration acceptance and invoice, a copy of which is attached. No sales have been made other than to the Government Stockpile.

---

* (40 feet down dip to point with 40 feet overburden, noting that ore crops out to west of crest of ridge)

RESTRICTED

Form approved by Comptroller General, U.S. September 26, 1952

GENERAL SERVICES ADMINISTRATION
DOMESTIC MANGANESE PURCHASE PROGRAM
(CARLOAD LOTS)

ACCEPTANCE AND INVOICE

DATE: 9-30-1953

ACCEPTANCE NUMBER: #84

ISSUED UNDER CERTIFICATE OF AUTHORIZATION NUMBER: 3-6 GS-OOP-7368 (SCM)-2

TO Old Dominion Manganese Co. Inc.
c/o J. Lewis, Room 2100
52 Wall Street, New York, New York

Subject to the terms and conditions of the Manganese Regulation establishing the Government's Purchase Program for Domestic Manganese Ore or Concentrates in carload lots, the Government accepts 517.406 long tons (wet basis) of [X] Manganese Ore [ ] Concentrates delivered f.o.b. by you at Strausburg, Va. 5, consigned to U. S. Naval Warehouse, at Point Pleasant, W. Va. on B/L No. 11273, 715599. Such material has a moisture content of 11.574 L.D.T. % and analyses in a dry basis as follows: 69677, 263116, 46560, 264715, 89803, 41164, 705962, 36078

Computed on average weighted basis, Dry Weight

	PERCENT
MANGANESE (Mn)	43.119770
IRON (Fe)	5.060023
SILICA (SiO_2) PLUS ALUMINA (Al_2O_3)	10.144509
PHOSPHOROUS (P)	.258710
COPPER PLUS LEAD PLUS ZINC (Cu + Pb + Zn)	.173896

EVALUATION AND SETTLEMENT DATA

	DOLLARS
BASE PRICE - PER L.D.T. UNIT	2.30

PREMIUMS	DIFFERENCE		DOLLARS		DOLLARS
Mn ABOVE 48%	.0000	X	.005	=	.0000
Fe BELOW 6%	.9400	X	.005	=	.0047

NET INCREASE .0047

PENALTIES	DIFFERENCE		DOLLARS		DOLLARS
Mn BELOW 48% TO AND INCLUDING 44%	4.0000	X	.01	=	.0400
Mn BELOW 44% TO AND INCLUDING 40%	.8803	X	.015	=	.0132
Fe ABOVE 6% TO AND INCLUDING 8%	.0000	X	.01	=	.0000
Fe ABOVE 8% TO AND INCLUDING 16%	.0000	X	.0075	=	.0000
SiO_2 + Al_2O_3 ABOVE 11% TO AND INCLUDING 15%	.0000	X	.01	=	.0000
P ABOVE 0.12% TO AND INCLUDING 0.30%	.1387	X	.0033	=	.0462

NET DECREASE .0994

NET AMOUNT OF ADJUSTMENT PLUS .0047 MINUS .0994

ADJUSTED BASE PRICE - PER L.D.T. UNIT 2.2053

LONG WET TONS		MOISTURE CONTENT		LONG DRY TONS		% Mn.		L.D.T. UNITS		ADJUSTED BASE PRICE		PAYMENT
517.406	-	11.574	=	505.832	X	43.11977	=	21,811.3594	X	2.21	=	48,203.10

ACCEPTANCE

Less Amount Paid 35,374.44

12,828.66

RECEIVED AND ACCEPTED BY GENERAL SERVICES ADMINISTRATION AT

BY (Type name): F. W. Itt

SIGNATURE:

TITLE: Coordinator of Sales

FOR USE OF PRODUCER ONLY

INVOICE

TO: General Services Administration

REGION NUMBER:

CITY AND STATE:

FOR [ ] MANGANESE ORE [ ] CONCENTRATES 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 material was mined in the Continental United States.

PRODUCER (Type name): OLD DOMINION MANGANESE COMPANY, INC.

DATE: October 7, 1953

BY (Signature): President

TITLE: President

#713 #714 #5-19

RESTRICTED

GSA-WASH DC 53-3922

GSA FORM 1037 September 1952

Following is a summary of cars shipped prior to September 4, 1953:

GSA BILL of LADING	ODMCo CAR NO.	R.R.CAR	DATE SHIPPED	LONG DRY TONS	ORE SOURCE
237546	1	B&O 264820	3/2/53	46.652	Old open pit
47	2	B&O 264701	3/2/53	45.505	ditto
69	3	C&N 143571	4/8/53	50.014	ditto
70	4	C&O 40493	4/21/53	46.322	ditto
234334	5	P&LE 11273	7/1/53	43.261	DMEA 1N-3N
5	6	NYC 715559	7/16/53	46.166	ditto
6	7	B&O 36078	7/23/53	46.005	ditto
7	8	W&LE 46560	8/10/53	56.880	ditto
246169	9	B&O 263116	8/13/53	58.484	ditto
"	10	DL&W 69677	8/13/53	45.973	ditto
246170	11	N&W 89803	8/22/53	60.196	ditto
"	12	B&O 264715	8/22/53	53.120	ditto
246171	13	P&LE 41164	9/3/53	44.211	ditto
"	14	NYC 705962	9/3/53	51.540	ditto

- - - - - - - -

Respectfully submitted,

Robert C. Stephenson
Geologist

March 3, 1954.

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 2 1954

February 2, 1954

Memorandum

To: George C. Selfridge, Chairman, DMEA Operating Committee

From: Executive Officer, DMEA Field Team, Region VIII

Subject: Docket No. DMEA-2359 - (Manganese)
Mineral Ridge Mine, Old Dominion Manganese Co., Inc.
Shenandoah and Frederick Counties, Virginia
Contract No. Idm-E374

Transmitted herewith in quadruplicate is H. L. Burmeister's Field Inspection Report of January 28, 1954, for subject contract.

W. T. Millar

W. T. Millar

Enclosures

DMEA
Field Inspection Report
by
H. L. Burmeister, Engineer
January 28, 1954

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 2 1954

Operator:	Old Dominion Manganese Co., Inc.
Address:	Room 2100, 52 Wall St., New York 5, N.Y.
Mine & Location:	Mineral Ridge Mine, Shenandoah and Frederick Counties, Virginia
Docket No.:	DMEA-2359
Contract No.:	Idm-E374
Commodity:	Manganese
Total Cost:	$39,600.00
Government Participation:	75% - $29,700.00
Duration of Contract:	18 months - from July 29, 1952 to January 29, 1954

This property was visited on January 28, 1954. Mr. R. C. Stephenson is now direct manager of this mine. His address is Old Dominion Manganese Co., Inc., Room 2500, Girard Trust Bldg., Philadelphia 2, Pennsylvania.

The firm of Woodward and Dickerson of Philadelphis and the Frank Samuel Co., Inc. of the same city have been jointly retained by the Old Dominion Manganese Co., Inc. to manage the mine. It is understood that both of these companies are stockholders in the Old Dominion Manganese Co. Mr. R. C. Stephenson is in active charge and is acting for both management companies. He is also a Vice President of the Old Dominion Manganese Co.

The last work done under this contract was in December 1952. The contract was terminated September 4, 1953 after commencing but before completion.

On January 13, 1954 this office instructed the company to submit their final report within 60 days. Mr. Stephenson assured the engineer that this would be done.

The information necessary to be included in the final report was reviewed with Mr. Stephenson. It was suggested that the company should have assembled all data relative to shipment of production as well as copies of settlement sheets from the purchaser. These should be ready to be submitted to the Government in the event a Certificate of Discovery or Development is issued. It was also mentioned that in event a Certificate was issued, the company should instruct the purchaser to send direct to the Government a copy of the settlement sheets and pay the royalty on each shipment, direct to the Government.

As the locations of trenches and pits are now obliterated by the removal of ~~the~~ overburden and ore, and as the operator had no record of their location, the DMEA engineer supplied data so that the trenches could be located on the operator's map accompanying his final report.

Mr. Stephenson states that about 18,000 cu. yds. of overburden have been stripped from DMEA ground. This is considered as reasonable by the engineer, but may be a trifle high.

Ore production from the area covered by the DMEA contract started June 22, 1953 at trenches N-2 and N-3. Mr. Stephenson states that this company has produced 1070 tons of manganese concentrate from DMEA ground between January 1, 1953 and January 1, 1954 all from the north end, and 300 tons of concentrate from company ground at the south end of the original large open workings. The average assays for the total 1370 tons of concentrates are stated to be about 41.5% Mn, 5.5% Fe, 0.244% P and containing about 2.5% moisture. Details entering into the above tonnages and grades were not available at the mine office.

During this entire operation the minus 6-mesh mineral has not been recovered because tables are needed for concentrating this material and were not available at the time operations started. This material has been stockpiled at the mill. Two tables are now installed and should start operations within a week. The Government has an interest in approximately 78% of the concentrate to be recovered from this stockpile.

H. L. Burmeister

College Park, Md.
January 29, 1954

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

Department of the Interior
Defense Minerals Administration
RECEIVED
JAN 26 1954

January 25, 1954

Memorandum

To: George C. Selfridge, Chairman, DMEA Operating Committee

From: Executive Officer, DMEA Field Team, Region VIII

Subject: Docket No. DMEA-2359 - (Manganese)
Old Dominion Manganese Co., Mineral Ridge Mine,
Shenandoah and Frederick Counties, Virginia
Contract No. Idm-E374

Transmitted herewith in quadruplicate is a copy of a letter dated January 21, 1954, from Mr. Robert C. Stephenson, Manager, Old Dominion Manganese Co., regarding the status of the Operator's Final Report on subject contract.

W. T. Millar

W. T. Millar

Enclosures

C O P Y

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 26 1954

OLD DOMINION MANGANESE COMPANY
Incorporated
Star Tannery, Virginia

Please reply to:
Room 2500 Girard Trust Bldg.
Philadelphia 2, Pa.
LOcust 4-5600

January 21, 1954

Mr. W. T. Millar, Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII
U. S. Department of the Interior
College Park, Maryland

Dear Mr. Millar:

Your letter of January 13, addressed to Mr. John B. Lewis in New York, has been referred to me for reply.

Preparation of a final report is under way and has been delayed somewhat for lack of a suitable base map. However, this base map is now available, and I will proceed with preparation of this report as soon as possible. I will make every effort to have it completed within the next six weeks, and trust that this will be acceptable to you.

I have talked with your Mr. Burmeister over the phone concerning this report, and it is probable that Mr. Burmeister will visit the property with me this coming week.

Very truly yours,

OLD DOMINION MANGANESE CO. INC.

/s/ Robert C. Stephenson
Robert C. Stephenson, Manager

fm

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 14 1954

January 13, 1954

WBM

Mr. John B. Lewis, President
Old Dominion Manganese Co., Inc.
Room 2100, 52 Wall Street
New York 5, N. Y.

Subject: Docket DMEA-2359
(Manganese)
Contract No. Idm-E374

Dear Mr. Lewis:

Reference is made to our letter of September 10, 1953, stating that a final report must be made on a terminated contract and also to our letter under date of October 30, 1953, requesting that this report be made. Our only communication from you on this subject is a letter of November 2, 1953, stating that a final report would be submitted upon completion of necessary engineering work.

This will advise that if a satisfactory report is not received within sixty days, the Government will have one prepared as an expense of the exploration project according to Article 7(c) of the subject contract.

Very truly yours,

W. T. Millar, Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII

WTM:HLBurmeister:rwa

copy for Mr. Selfridge
DMEA Files 2

Rutledge
Martin
[redacted]
Talbot
Rutin
Hoffmeyer
Selfridge
Johnson
Whitenday

JAN 12 1954

Mr. L. T. Miller, Executive Officer
DMEA Field Team, Region VIII
Bureau of Mines
Eastern Experiment Station
College Park, Maryland

Re: Docket No. DMEA 2359, Manganese
Old Dominion Manganese Co., Inc.
Mineral Ridge mine
Shenandoah and Frederick Counties,
Virginia
Contract No. Idm-3374

Dear Mr. Miller:

Reference is made to correspondence in the subject docket requesting a final report from the Operator.

If the requested report has not already been received, the Operator should be advised that unless a satisfactory report is received within 60 days the Government will have one prepared as an expense of the exploration project according to Article 7(c) of the referenced contract.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (24B)

Approved:

J. H. Hedges (24B)

Member, Bureau of Mines

Z. P. Thayer (24B)

Member, Geological Survey

Copy to: Docket
Adm. Read. File
Code 400
Oper. Comm.
FT, Reg. 8
Louis Pavlides, USGS
Gilbert DeHuff, USBM

FARutledge/ls
1/7/54

R.C.S.
1-12-54

Alumea
2359

Copied from the MINING WORLD, January 1954, page 87

Dr. Stephenson is reported to be managing the manganese property known as the Old Dominion mine near Star Tannery, Virginia. About 20 carloads of metallurgical grade manganese are said to have been shipped from the property.

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 30 1953

October 30, 1953

WSM

Mr. John B. Lewis, President
Old Dominion Manganese Co., Inc.
Room 2100, 52 Wall Street
New York 5, N. Y.

Subj: Docket DMEA-2359 (Manganese)
Old Dominion Manganese Co., Inc.
Mineral Ridge Mine, Shenandoah & Frederick Counties, Virginia
Contract No. Idm-E374

Dear Mr. Lewis:

Reference is made to our letter of September 10, 1953 and in particular to paragraph three.

The Operator's contract obligation to prepare and submit a final report was brought to your attention. As the report has not been received, it is requested that this matter be expedited in order that processing may be completed.

Very truly yours,

N. A. Eilertsen for
W. T. Millar, Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII

HLBurmeister:rwa

copy for Mr. Selfridge
DMEA Files 2

Copy made
retained 400

Defense Minerals Administration
RECEIVED
OCT 30 1953

College Park, Maryland

September 10, 1953

Mr. John B. Lewis, President
Old Dominion Manganese Co., Inc.
Room 2100, 52 Wall Street
New York 5, N. Y.

Re: Docket DMEA-2359 - (Manganese)
Old Dominion Manganese Co., Inc.
Mineral Ridge Mine, Shenandoah
and Frederick Counties, Va.
Contract Idm-E374

Dear Mr. Lewis:

Inasmuch as the Operator under the subject contract is actively producing and marketing concentrates from manganese ore mined on the property described in this contract, and since exploratory work specified as Stage I in this contract was completed in December of 1952, and to date the work specified as Stage II of the contract has not been started, it is considered advisable that this contract be terminated.

Enclosed are the original and five copies of Termination of Exploration Project Contract by Agreement after Commencement but before Completion of the Work, signed by the Administrator of the Defense Minerals Exploration Administration for the Government. If the terms and conditions of this agreement are satisfactory to you, please sign all six copies, retain the copy marked "Operator" for your file and return the original and four copies to this office.

Please note Article 7(b) of the contract which requires the Operator to provide the Government with an adequate geological and engineering report, in quintuplicate, including an estimate of ore reserves resulting from the exploratory work. Upon receipt of your final report, it will be reviewed for issuance of a Certificate of Discovery or Development.

If at some future date it is considered advisable to conduct additional exploratory work, you may file another application through the DMEA for Government participation.

Very truly yours,

WTM:rwa

copies for USGS
DMEA Files 2

W. T. Millar, Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII

Enclosures 6

FILE COPY
SURNAME: MDL

400 Rutledge
Martin
Selfridge
Edmunds
Matthews

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

OCT 29 1953

Mr. W.T. Millar, Executive Officer
DMEA Field Team, Region VIII
Bureau of Mines
Eastern Experiment Station
College Park, Maryland

Re: Docket No. DMEA 2359 - Manganese
Old Dominion Manganese Co., Inc.
Mineral Ridge mine
Shenandoah and Frederick Counties,
Virginia
Contract No. Idm-E374

Dear Mr. Millar:

Reference is made to our letter of September 8, 1953, and the subject docket. It would be appreciated if you would contact the Operator and expedite our receiving his final report.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee (GCS)

APPROVED:

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

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

FARutledge:foc
10-27-53
cc: Docket
Code 400
FT. Reg. 8
Operating Comm.
Admr. Reading File
Gilbert DeHuff, USBM
Louis Pavlides, USGS

R.S.J.
10-29-53

FILE COPY
SURNAME:
MDL
Talbert
Chambers

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

OCT 22 1953

Mr. W. T. Millar
Executive Officer
DMEA Field Team, Region VIII
Eastern Experiment Station
College Park, Maryland

Re: Idm-F374, DMEA-2359
Old Dominion Manganese Co.
Mineral Ridge Mine
Shenandoah & Frederick Counties,
Virginia

Dear Mr. Millar:

Enclosed herewith is the original and two copies of a Report of Review covering the referenced exploration project contract.

This Report of Review, which has been issued as a result of a recent telephone conversation between you and Mr. Talbert, should be distributed in accordance with Section 3 to Supplement No. 4 of DMEA Circular 19.

Sincerely yours,

(Signed) J. L. Chambers

Jay L. Chambers, Chief
Contract Administration
and Audit Division

Enclosure

EDTalbert/wb
October 22, 1953

Copy to: Docket
Admr. Reading File
Mr. Chambers

R.C.G.
10-22-53

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

September 30, 1953

Memorandum

To: George C. Selfridge, Chairman, DMEA Operating Committee

From: Executive Officer, DMEA Field Team, Region VIII

Subject: Docket No. DMEA-2359 - (Manganese)
Old Dominion Manganese Co., Inc.
Mineral Ridge Mine
Shenandoah and Frederick Counties,
Virginia
Contract No. Idm-E374

The Finance Office and Field Team copies of the Termination of Exploration Project Contract by Agreement after Commencement but before Completion of the Work on the subject contract, signed by the Operator and the Administrator for the Government, were received today.

Since submitting the Interim Report on August 13 for this project there has been no further exploratory work. It is proposed that the Interim Report be considered as the Final Report. However, the Field Team will keep abreast with the activities on this deposit and if and when a Certification is issued for this project, an accurate account of the production from that part of the deposit included in the contract will be made.

W. T. Millar

W. T. Millar

SEP 8 1953 400

FILE COPY
SURNAME:

Rutledge
McKeon
Philbin
Chambers
Ellis
Selfridge

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

SEP 8 - 1953

Mr. W. T. Millar, Executive Officer
DMEA Field Team, Region VIII
Bureau of Mines, Eastern Experiment Station
College Park, Maryland

Re: Docket No. DMEA 2359 - Manganese
Old Dominion Manganese Co., Inc.
Mineral Ridge mine
Shenandoah and Frederick Counties,
Virginia
Contract No. Idm-E374

Dear Mr. Millar:

Reference is made to the subject docket and the Field Team's recommendations that a discovery be certified and the above-referenced contract be terminated.

Enclosed are the original and five copies of Termination of Exploration Project Contract by Agreement after Commencement but before Completion of The Work, signed by the Administrator for the Government.

If the terms and conditions of this agreement are satisfactory to you and the Operator, all six copies should be signed and the usual distribution made. If the Operator does not agree to the enclosed termination agreement, please advise so we can terminate the contract on the grounds that additional work would not be in the interest of the Government.

The Field Team should call the Operator's attention to Article 7(b) of the contract which states: "Upon completion of the exploration work or termination of the contract the Operator shall provide the Government with an adequate geological and engineering report, in quintuplicate (five copies), including an estimate of ore reserves resulting from the exploration work."

Sincerely yours,

Ernest Wm. Ellis
ES7
ACTING Chairman, Operating Committee

Enclosures

APPROVED:

J. H. Hedges ES7
Member, Bureau of Mines

A. R. Kinkel, Jr. ES7
Member, Geological Survey

Copy to: DOCKET
FT, REG. VIII
CODE 400
OPER. COMM.
ADM. READ. FILE
MARTHA CARR, USGS
GILBERT DEHUFF, USBM

FARutledge/ls
9/2/53

9-8-53

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 13 1953

August 13, 1953

Memorandum

To: George C. Selfridge, Chairman, DMEA Operating Committee

From: Executive Officer, DMEA Field Team, Region VIII

Subject: Docket No. DMEA-2359 - (Manganese)
Mineral Ridge Mine, Old Dominion Manganese Co., Inc.
Shenandoah and Frederick Counties, Virginia
Contract No. Idm-E374

Transmitted herewith in quadruplicate is an Interim Report on Contract No. Idm-E374, by the DMEA Field Team of Region VIII.

W. T. Millar

W. T. Millar

Enclosures 4

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 13 1953

INTERIM REPORT

August 11, 1953

Accepted as FT Final Report

Docket No. DMEA-2359 - (Manganese)

Contract No. Idm-E374

Old Dominion Manganese Co., Inc.
Room 2100, 52 Wall Street
New York 5, N. Y.

Mineral Ridge Mine, near Star Tannery, Virginia
16 miles NW of Strasburg in Frederick & Shenandoah Counties, Va.

The Field Team examination was made by H. L. Burmeister, Mining Engineer of the Bureau of Mines, representing the Defense Minerals Exploration Administration.

Summary:

The purpose of this contract was to explore the area north and south of the old workings for possible extension of the Mineral Ridge manganese deposit. That portion of the deposit embraced laterally between the north and south faces of No. 6 drift and containing all the old underground workings was excluded from the contract, Fig. 1 and Fig. 2.

Exploration work consisted of two stages. Starting Stage II depended on the results obtained in Stage I.

Stage I provides for 30 bulldozer trenches and 30 test pits to be sunk, one in each trench if warranted. Twenty-four trenches were bulldozed and 15 test pits were sunk. All trenches and test pits were sampled and assayed. Ore was found in 14 test pits, as shown in Table No. 1. Stage II provides for extending No. 6 level drift either north or south or in both directions for an aggregate distance of 1,000 feet. Drifting was to start after the company had rehabilitated No. 6 level for its own account. Rehabilitation was not started and Stage II has not been entered.

Of the $9,000.00 allowable maximum provided for Stage I, there remains unexpended $2,822.78.

Conclusions:

The results of surface exploration under Stage I are considered satisfactory by the Field Team. The purpose of the exploration project having been accomplished, it is considered unnecessary and unwarranted to enter Stage II.

FINAL
FT. RPT.

To date seven cars of concentrate averaging 44.2 percent manganese, have been sold to the Government and three carloads with high phosphorus are stockpiled for blending. Five of these cars were concentrated from ore produced from the section subject to royalty payments under the DMEA contract. Three of the five cars have been sold to the Government and two are held for blending.

It is concluded that manganese ore of a grade and tonnage sufficient for economic production has been indicated and that additional exploration with Government assistance is not warranted.

Recommendations:

It is recommended that the Government withdraw from further participation in this exploration project.

It is further recommended that a Certificate of Discovery or Development be issued and that royalties from production be claimed by the Government.

Description of Work Completed:

Work was started under this contract in October 1952 and Stage I was completed in December 1952. Stage II has not been entered.

Work done under Stage I consisted of bulldozing 14 trenches across the mineralized zone on its north extension and 10 trenches on its south extension as well as sinking a test pit in each trench where indications of mineralization warranted the additional work.

The 14 trenches on the north extension all exposed mineralization and also the limestone footwall near which the better ore has always occurred. None of the 10 trenches on the south extension of the structure exposed mineralization although the footwall limestone was encountered in each trench, (Fig. 1 and Fig. 2). Bulldozed trenches averaged 8 feet deep, 11 feet wide and 50 feet long. Excluding supervision but including clearing timber and dozer wasting on one end of trench, the cost of trenching was about $1.07 per yard. Much of this work was done in semi-solid material.

A test pit was sunk in the bottom of each of the 14 trenches on the north extension and one in trench ST-3 on the south extension. Test pits were 3 feet wide, 7 feet long across the strike and 10 feet deep. About one half of the 122 cu. yards excavated required blasting. The cost less supervision was $6.15 per yard. All test pits were channel sampled except SP-3, which was barren of mineralization.

Under Stage II the contract provides that No. 6 crosscut and drifts be rehabilitated at company expense before Stage II may start. In the seven months since completion of Stage I, no attempt has been made to do this required work, as a result of which Stage II has not been entered. The estimated cost of rehabilitation would be about $16,000.00

It is believed that the interest of the company would be served if No. 6 level is not rehabilitated and Stage II not entered.

Table I

Test Pit Samples

Pit No.	Normal Width Feet	Mn %	Fe %	P %
North Face				
Main Pit	11.5	20.43	3.35	-
NP-1	12.2	15.97	1.56	0.160
NP-2	12.0	20.95	4.52	0.254
NP-3	11.5	37.16	1.66	0.272
NP-4	8.0	16.71	1.91	0.202
NP-5	8.7	11.00	3.19	0.183
NP-6	10.0	13.42	2.29	0.181
NP-7	12.2	22.15	1.96	0.236
NP-8	10.7	17.11	2.86	0.300
NP-9	10.5	20.00	1.70	-
NP-10	10.1	11.70	4.37	0.436
NP-11	11.5	6.35	3.17	-
NP-12	8.0	6.06	3.56	-
NP-13	8.0	5.51	3.71	-
NP-14	11.0	9.71	3.92	-
SP-3	No mineral	-	-	-

Description of Geology:

The Mineral Ridge manganese deposit occurs in a bed of chert about 50 feet thick which crops out along or near the crest of Mineral Ridge and which consists of chert in thick and thin layers and a small amount of red and yellow clay that is interbedded with the chert. It has probably been derived from the weathering of a cherty limestone from the upper Helderberg formation.

The ore bearing chert bed is overlain by a yellow sandy clay up to 50 feet in thickness, probably derived from the weathering of impure limestone beds at the top of the Helderberg limestone. This sandy clay is overlain by Oriskany sandstone which forms the crest of Mineral Ridge both to the northeast and southwest of the mine. Underneath the ore bearing chert there is a bed of limestone 100 feet thick. 1/

1/ Virginia Geological Survey, Bull. No. 23, Manganese Deposits of West Virginia, 1922, by G. W. Stose and H. D. Miser.

Where observed in the trenches and pits made under this project, the higher grade ore occurs near the limestone footwall. There are several other bed-like areas of manganese mineralization parallel to the ore and higher stratagraphically in the chert bed. These, where observed underground and in the trenches and cuts, are low grade and do not contain the hard ore found closer to the footwall. The productive mining done in the past was from the footwall ore where the chert bed containing the ore is closely and tightly folded within itself. The local dip often changes 70 to 80 degrees within 5 to 10 feet. The chert bed containing these tight folds, itself, dips an average of 30 degrees to the southwest.

No. 8 crosscut tunnel which is located nearly under No. 6 crosscut and 78 feet vertically below No. 6 level, penetrated the chert bed but failed to encounter more than slight mineralization. In this connection it is interesting to note that the ore horizon fades out downward at about the elevation of pit NP-10 which is 25 feet vertically below the level of No. 6 level. See Figure 1.

The data on channel sampling in test pits are assembled in Table I. These data indicate an ore body in the section covered by the contract, with a strike length of 1,340 feet, a width of 10.7 feet and an average manganese content of 19.2 percent. The 1,340-foot strike length is embraced between a point 90 feet southwest of the northeast face of the main old pit and a point 45 feet northeast of pit NP-10. Block X, Figure 1, is excluded.

The ore developed by this program is itemized by blocks in Table II, and the blocks are located in Figure I. Ore developed has been calculated on an ore body dipping 30 degrees and extending from the top of test pits to a level 25 feet vertically below No. 6 level. A factor of 13 cu. feet per ton was assumed for estimating ore reserves.

Table II

Inferred Ore Developed by Blocks, Figure I

Block	Manganese percent	Tons
A	20.4	26,151
B	16.0	23,295
C	21.0	19,967
D	37.2	22,381
E	16.7	15,832
F	11.0	13,974
G	13.4	14,135
H	22.1	15,218
I	17.1	9,927
J	20.0	4,538
K	11.7	1,282

Excluding Block X from consideration, and on the basis of data from test pits, there has been developed 166,700 tons of inferred ore having an average manganese content of 20.26 percent.

It is estimated that a maximum of 22 percent of the total or 36,500 tons, may be mined by opencut workings.

In dealing with ore reserves it must be considered that maps of old workings indicate that the manganese mineralization is probably spotty and the present observations show that the phosphorus content varies from 0.160 to 0.436 percent. This condition makes impossible an accurate calculation of economic reserves.

Expenditures:

Total approved	-	$39,600.00
Total cost of project	-	6,177.22
Government's share of cost	-	4,632.92
Government's share unexpended	-	25,067.09

The value of production during operation from the area covered by this contract, is not available, but the following data on concentrates from this area was supplied by the operator:

1 car, shipped, 46 tons, Mn-43.73%, Fe-6.67%, P-0.130%
1 car, shipped, 46 tons, Mn-41.12%, Fe-6.67%, P-0.178%
1 car, shipped, Assays now being run.
About 46 tons, in stockpile No. 1, high phosphorus, held for blending.
About 46 tons, in stockpile No. 2, Mn-48.11%, high Phosphorus, held for blending.

The Government's royalty cannot be calculated at present.

Efficiency of Operations:

The actual exploration work done under this contract was accomplished efficiently. Records are not well kept and information had to be compiled by the Government engineer.

The superintendent is earnest and capable within his limits. Mill operations are considered to be poorly planned, part of which is apparently due to lack of capital and part to lack of knowledge and agreement in the management.

Equipment Purchased:

Exploration under this contract was conducted on a unit basis, therefore, no equipment was purchased under this contract.

Discussion

The area between the northerly and southerly faces of No. 6 level, Figures I and II, were exempted by the company from participation by the Government. It was their belief that ore could be easily extracted by underground methods at a comparatively low cost for their own account. The engineer has explored all the workings not completely caved and is of the opinion that none of the old workings are worth rehabilitating. Good practice would be to abandon Stage II and while mining all ore possible by surface methods, also drift southward on the ore from an opencut working which bottomed near pit NP-10. This would provide for underground work in winter months and also for level surface haulage to the mill.

Production from the area just south of the southwest face of the main old opencut workings, in an area exempted from Government participation, was stopped because of high phosphorus content which was slightly above 4 percent contained in the mineral wavellite. Inquiry indicated that this same condition was encountered below this spot in the old workings, but that high phosphorus ore is very limited in its horizontal extent.

To date the ratio of concentration has varied from 17 to 1 to 13 to 1, according to mill data on all ore processed. Measuring the volume of ore mined in the DMEA area and considering the concentrate produced, results in a ratio of concentration of 12.5 to 1. This could be materially improved by installing a concentrating table to handle the washed minus-6 mesh material screened out before heavy media concentrations.

W. T. Millar

W. T. Millar, Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII

Allen V. Heyl

Allen V. Heyl, U. S. Geological Survey
Member, Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII

1913

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 12 1953

August 11, 1953

Memorandum

To: George C. Selfridge, Chairman, DMEA Operating Committee

From: Executive Officer, DMEA Field Team, Region VIII

Subject: Docket No. DMEA-2359 - (Manganese)
Old Dominion Manganese Co., Inc.
Mineral Ridge Mine, Shenandoah and
Frederick Counties, Virginia
Contract No. Idm-E374

Transmitted herewith in quadruplicate is H. L. Burmeister's July Field Inspection Report on Contract Idm-E374.

W. T. Millar

W. T. Millar

Enclosures 4

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 12 1953

DMEA
Field Inspection Report
by
H. L. Burmeister, Engineer
August 6, 1953

Operator:	Old Dominion Manganese Co., Inc.
Mine and Location:	Mineral Ridge Mine, Shenandoah and Frederick Counties, Virginia
Docket No.:	DMEA-2359
Contract No.:	Idm-E374
Commodity:	Manganese
Total Cost:	$39,600.00
Government Participation:	75% - $29,700.00
Duration of Contract:	18 months - From July 29, 1952 to January 29, 1954

This property was visited August 6, 1953. No work has been done under this contract since December 1952, when Stage I was completed.

The mill is in operation on ore taken from the location of test pits NP-2 and NP-3 in the area covered by this contract. Ore production from June 22 to August 6, 1953 has been entirely from this area and is still in progress.

The superintendent reports that as of August 6, there has been produced from the DMEA area, 5 cars of concentrate, 3 of which have been shipped and sold to the Government, and 2 containing high phosphorus are in mill stockpiles to be blended with low phosphorus concentrate. The data available at the mine follow:

Cars DMEA Concentrate Produced

1. 46 tons, Mn-43.73%, Fe-6.67%, P-0.130% (shipped)
2. 46 tons, Mn-41.12%, Fe-6.67%, P-0.178% (shipped)
3. 46 tons, Assays now being run. (shipped)
4. Approximately 46 tons high phosphorus in stockpile No. 1 (no assays)
5. Approximately 46 tons, Mn-48.11%, with high phosphorus in stockpile No. 2 (no other assays)

There have been shipped 4 cars of concentrate and one car of high phosphorus content is in stockpile, from ore in which the Government does not participate. From the data available it appears that lately the ratio of concentration has been about 15 to 1 which is an improvement over the 18 to 1 first made.

Although it is difficult to judge exactly where the bottom of overburden stripping was, the excavation made in mining DMEA ore was measured. This results in a ratio of recovery of 12.5 to 1.

Two tables to concentrate the minus-6 mesh after washing and before heavy media concentration, have been purchased but are not yet on the property.

It is possible that this could increase the overall recovery by approximately 6 percent.

Mr. Bertelsen stated that he seriously doubts that the company will rehabilitate level No. 6 and then enter Stage II of the contract. He also stated that in his opinion the entire deposit could be readily mined by surface methods.

Although no definite statement was made, it was strongly intimated that Mr. Weaver and an associate Mr. Banks, both of Philadelphia, Pa., who are manganese buyers, are dealing for a controlling interest in the Old Dominion Manganese Company.

H. L. Burmeister
Mining Engineer

College Park, Md.
August 10, 1953

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 5 1953

August 4, 1953

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

Re: Docket DMEA-2359 - (Manganese)
Old Dominion Manganese Co., Inc.
Mineral Ridge Mine
Shenandoah and Frederick
Counties, Virginia
Contract No. Idm-E374

Dear Mr. Selfridge:

In reply to your letter of August 3 regarding the subject contract, the following will outline briefly the conditions existing on this project.

Stage I of this contract was completed in December 1952. Since December the Operator mined ore from the area which is not subject to royalty payments, for mill testing. In March Mr. Lewis, President of the company, called at this office for a discussion on the operation. During this discussion Mr. Lewis stated that his consulting engineer would submit plans to revise the work under Stage II. This plan has not been submitted, but mill testing continued and shipments of concentrates have been made. On June 22 of this year mining was started on the area explored under this contract. The Operator was advised to keep an accurate record of shipments and returns which are subject to Government inspection.

At this time the Field Team is preparing an Interim Report with maps and an ore estimate for consideration and discussion. You will be supplied with this information.

During a brief phone conversation with an official in the Washington Office last week, this subject was mentioned but not discussed in detail.

The present impression of the Field Team is that the project should be certified, based on the ore discovered by exploratory work under Stage I of this contract. A tentative estimate of 160,000 tons of 20 percent manganese ore has been made. Also, considering results of the exploratory work completed, Stage II of this contract does not seem to conform with good mining practice. Roughly, about 1/3 of the estimated ore reserve can be mined by open-cut, then drift on the ore from the lower contour of the open-cut. If this impression proves correct, then rehabilitation of tunnel No. 6 and underground exploration are unwarranted expense.

These points are being studied and another field inspection will be made this week for additional information. After a decision has been made the facts will be presented to the Operator for his consideration. The Operator has been given full cooperation by the Field Team throughout this project.

Sincerely,

W. T. Millar

W. T. Millar, Executive Officer
Bureau-Survey Field Team
DMEA, Region VIII

400

FILE COPY
SURNAME:

Rutledge
Martin
Selfridge
Hedges
Whitenday

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

AUG 3 1953

Mr. W. T. Millar, Executive Officer
DMEA Field Team, Region VIII
Bureau of Mines
Eastern Experiment Station
College Park, Maryland

Re: Docket No. DMEA 2359, Manganese
Old Dominion Manganese Co., Inc.
Mineral Ridge mine
Shenandoah and Frederick
Counties, Virginia
Contract No. Idm-E374

Dear Mr. Millar:

Reference is made to the subject contract on which no work has been done by the Operator since completion of Stage I in December 1952.

We have been advised the Field Team plans to recommend that a certification of discovery be issued and possibly that a termination notice also be issued. It would be appreciated if you would advise us whether such a termination has been discussed with the Operator and has received his consent or whether the termination should be made by the Government for failure of the Operator to complete the contract.

Sincerely yours,

George C. Selfridge
(S)
Chairman, Operating Committee

APPROVED:

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

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

FARutledge/ls
7/31/53
cc: DOCKET
FT. REG. 8
CODE 400
OPER. COMM.
ADM. [redacted] FILE
EDGAR GEALY, USBM
MARTHA CARR, USGS

R.C. 8/3/53

402

DEPARTMENT OF INTERIOR
Defense Minerals Administration
Region VIII

College Park, Maryland

August 20, 1953

Mr. John B. Lewis, President
Old Dominion Manganese Co., Inc.
Room 2100, 52 Wall Street
New York 5, N. Y.

Subject: Operator's Report for July, 1953
Docket No. DMEA-2359 (Manganese)
Contract No. Idm-E374

Dear Mr. Lewis:

This will acknowledge receipt of "Operator's Monthly Report" for July, 1953 on the subject contract.

Regarding tonnages of ore mined in which the Government has an interest and the concentrates produced, it is suggested that these figures be kept to date at the mine office so that they may be readily available to the Government engineer.

On my visit to the mine August 6, there were two stockpiles containing high phosphorus concentrate. It was understood that each contained approximately 46 tons and that they were from the north end of the property. As this does not agree with the subject report, the error was probably one of misunderstanding. This can be avoided in the future if accurate records are available as suggested.

Very truly yours,

H. L. Burmeister, Acting Executive
Officer, Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII

HLB:rwa

copies for GeoCSelfridge 2
FRKantner, Fin. Off.
DMEA Files 2

M7-104
July

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 1 - 1953

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of July, 1953 Docket No. DMEA 2359 Contract No. Idm-E-374
Operator's Name OLD DOMINION MANGANESE COMPANY, INC. Minerals Manganese
Address STAR TANNERY, VIRGINIA
Contract Amount, $ 39,600. Government Participation: 75 % Amount, $ 29,700.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
Stage 1	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent / Short Form Contracts:						
Drilling Trenches	None	$4,200.00	$4,200.00			
Bulldozing						
Crosscutting						
Drifting						
Test Pits	None	750.00	750.00			
(2) Labor and Supervision:						
Labor Assayer	None	214.00	214.00			
Supervision	None	740.00	740.00			
Technical Services Consult.	None	175.00	175.00			
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
Laboratory Supplies	None	46.50	46.50			
(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	None	42.93	42.93			
Liability Insurance	None	8.79	8.79			
(8) Contingencies (specify):						
TOTALS		$6,177.22	$6,177.22			

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

Date August 15, 1953 Payee OLD DOMINION MANGANESE COMPANY, INC.

Per John B. Lewis Title President

*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:

$ None

Signature L. R. Kartner, Adm. Asst.
(Authorized Certifying Officer)

Date 8/28/53 Vou. No. None
(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. E-374 in accordance with the terms of the contract.

Signature W. L. Burmeister Title Mining Eng. Date 8/20/53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature W. L. Burmeister, acting for W. T. Millar Title Exec. Officer Date 8/20/53

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GPO 83-38476

Form MF-104A
(April 1952)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 1 1953

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of July 1953 Docket No. DMEA 2359 Contract No. Idm-E-374
Operator's Name OLD DOMINION MANGANESE COMPANY, INC. Minerals Manganese
Address STAR TANNERY, VIRGINIA

OPERATION Stage 1	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 Dozer	1	None		$4,746.39	24	197.76	30	212.50
Test Pits	1	None		1,430.83	15	95.39	30	90.83
Roads and Trails								
Total Distributed Costs		None		6,177.22				Total Costs Authorized by Contract
Operating Equipment Purchased						Stage 1		$ 9,900.
Initial Rehabilitation and Repairs						Stage 2		30,600.
New Buildings, Improvements, etc.								
Total Costs								$39,600.

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.

Remarks:

Date August 15, 1953 Operator OLD DOMINION MANGANESE CO., INC.

Per John B. Sears Title President

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

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205676

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 1 - 1953

College Park, Maryland

August 20, 1953

Mr. John B. Lewis, President
Old Dominion Manganese Co., Inc.
Room 2100, 52 Wall Street
New York 5, N. Y.

Subject: Operator's Report for July, 1953
Docket No. DMEA-2359 (Manganese)
Contract No. Idm-3374

Dear Mr. Lewis:

This will acknowledge receipt of "Operator's Monthly Report" for July, 1953 on the subject contract.

Regarding tonnages of ore mined in which the Government has an interest and the concentrates produced, it is suggested that these figures be kept to date at the mine office so that they may be readily available to the Government engineer.

On my visit to the mine August 6, there were two stockpiles containing high phosphorus concentrate. It was understood that each contained approximately 46 tons and that they were from the north end of the property. As this does not agree with the subject report, the error was probably one of misunderstanding. This can be avoided in the future if accurate records are available as suggested.

Very truly yours,

H. L. Burmeister, Acting Executive
Officer, Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII

HLB:rwa

copies for GeoCSelfridge 2
FRKantner, Fin. Off.
DMEA Files 2

OLD DOMINION MANGANESE COMPANY, INC.

STAR TANNERY, VIRGINIA

CONTRACT Idm - E-374

MONTH OF JULY 1953

NARRATIVE:

Ore from the north extension of the open cut in the vicinity of dozer trenches N 3 continued to be mined and milled, and shipments began as follows:

MONTH	ORE MINED	CONCENTRATE - PRODUCED	CONCENTRATE - SHIPPED
June	784 Tons	50.01 Tons	44.55 Tons
July	2,807	138.50	95 -
	3,591 Tons	188.51 Tons	139.55 Tons

The sales price has not yet been determined and should be available for the next monthly report.

Further operations under this contract have not yet been resumed.

OLD DOMINION MANGANESE COMPANY, INC.

John B. Sears

President

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL - 7 1953

July 6, 1953

Memorandum

To: George C. Selfridge, Chairman, DMEA Operating Committee

From: Executive Officer, DMEA Field Team, Region VIII

Subject: Docket No. DMEA-2359 - (Manganese)
Mineral Ridge Mine, Old Dominion Manganese Co., Inc.,
Shenandoah and Frederick Counties, Virginia
Contract No. Idm-E374

Transmitted herewith in quadruplicate is H. L. Burmeister's field inspection report for June, for subject contract.

W. T. Millar
W. T. Millar

Enclosures - 4

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL - 7 1953

DMEA
Field Inspection Report
by
H. L. Burmeister, Engineer
July 3, 1953

Operator:	Old Dominion Manganese Co., Inc.
Mine & Location:	Mineral Ridge Mine, Shenandoah and Frederick Counties, Virginia
Docket No.:	DMEA-2359
Contract No.:	Idm-E374
Total Cost:	$39,600.00
Government Participation:	75% - $29,700.00
Commodity:	Manganese
Duration of Contract:	18 months - from July 29, 1952 to January 29, 1954.

This property was visited July 3, 1953. As operations were not in progress, Mr. Trice Carter, the superintendent, was the only one at the mine.

Stage I of this project was completed in December 1952, since which time no DMEA work has been done.

The mill was operated intermittently on ore taken from the south end of the main open-cut workings in which area the Government holds no interest. The mill operation has been largely in the nature of test runs to adjust equipment and perfect recovery. Four carloads of concentrates obtained from the south end have been shipped.

Early in June the ore being mined from the south end of the main pit contained approximately 4 percent phosphorus. About 20 tons of concentrate were made which assayed about the same as the ore in phosphorus. This area in the pit is vertically above a high phosphorus location reported by previous operators on the No. 6 level, near a raise encountered by the shovel. The previous operators state that this condition was local in horizontal extent. The phosphorus mineral is wavelite which can be readily identified when the phosphorus content of the ore exceeds 0.30 percent. This could be very helpful in selective mining.

The operators have temporarily abandoned the high phosphorus area and bulldozed off about 4 feet of overburden from DMEA trench and pit N3 to N5, exposing good ore. Mining this ore in which the Government has an interest, started June 22, 1953. There was mined from the area of trench and pit N3, 680 tons of ore from which was extracted 99,800 pounds of heavy media concentrate, the assays on which were not yet available. The phosphorus content is believed to be acceptable, however, as the test pit assayed 0.272 percent phosphorus. The ratio of concentrates on this ore was 13.6 to 1, which could without doubt be materially lowered by waste stripping about 2 feet more of the surface. Installations of concentrating tables to recover the minus 6-mesh mineral would add possible 15 percent to the recovery. A high percentage of this ore is hard and solid. It is planned to continue mining operations in the north area which is under the DMEA CONTRACT.

The superintendent was advised of the necessity of keeping an accurate record of ore mined and concentrate made and shipped.

Following are the results of assays for phosphorus on the DMEA test pit samples:

Test Pit No.	Phosphorus (Percent)
NP-1	0.160
NP-2	0.254
NP-3	0.272
NP-4	0.202
NP-5	0.183
NP-6	0.181
NP-7	0.236
NP-8	0.300

Mr. Carter stated that very recently Mr. W. Weaver and a Mr. Banks have purchased interests in the company and it is expected that Mr. Weaver will direct the pdicies of the company in the immediate future. Mr. Weaver is with the Frank Samuel Co. in Philadelphia, Pa. Both Mr. Weaver and Mr. Banks are manganese buyers.

It is believed that the company plans to sink an inclined shaft from a point near the mill to a point on the vein 30 or 40 feet below the No. 6 level. This would be in the area excluded from the DMEA contract. Rehabilitation of No. 6 level and estension of the level as specified in Stage II of the contract would under these circumstances, be abandoned.

In view of the ore developed by the DMEA project and the fact that production has started on this ore, it is believed that the Government can issue a certificate of discovery or development.

Mr. Lewis, Mr. Weaver and Mr. Banks are expected at the mine on Tuesday, July 7 to outline company policy including that regarding continuance of DMEA work. It was indicated to Mr. Carter that this office would appreciate being notified of these plans.

H. L. Burmeister
Mining Engineer

College Park, Md.
July 6, 1953

Defense Materials Administration
RECEIVED
JUL 30 1953

College Park, Maryland

July 29, 1953

WSM

Memorandum

To: George C. Selfridge, Chairman, DMEA Operating Committee

From: Executive Officer, DMEA Field Team, Region VIII

Subject: Operator's Monthly Report - June 1953
Mineral Ridge Mine, Old Dominion Manganese Co., Inc.
Shenandoah and Frederick Counties, Virginia
Contract Idm-F374 - Docket DMEA-2359 - (Manganese)

Transmitted herewith in duplicate is the June progress report from the Old Dominion Manganese Co., Inc. on subject contract.

As there was no progress in the exploration during June, no costs are shown for this month.

W. T. Millar

Enclosures 2 -(with copies of WTMillar's letter of July 29, 1953 to JohnBLewis, Pres., Old Dominion Manganese Co., Inc.)

WTM:rwa

cc ✓ 1. GeoCSelfridge- 2. JCChambers
DMEA Files 2

June
214-104

RECEIVED
JUL 30 1953

College Park, Maryland

July 29, 1953

Mr. John B. Lewis, President
Old Dominion Manganese Co., Inc.
Room 2100, 52 Wall Street
New York 5, N. Y.

Subject: Docket No. DMEA-2359
Contract No. Idm-1374

Dear Mr. Lewis:

The narrative included in your "Operator's Monthly Report" for the month of June 1953 on the subject contract, stated that ore was being mined from the area covered by this contract. This was also noted by Mr. Burmeister on his inspection of the project on July 3.

It is brought to your attention that complete records of mine production, certified copies of concentrate shipping records and settlement statements must all be preserved as required by the terms of the contract. These must be available to the Government if required.

The Operator's Monthly Report should include a statement of such production, transportation and sale which may be substantiated by the certified copies above mentioned in case a Certificate of Discovery or Development is issued.

The June production as well as that of July, may be reported in your Operator's report for July.

Very truly yours,

W. T. Millin, Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII

WTM:HLBurmeister:rwa

copies for GeoCSelfridge, Chrm. Oper. Comm., DMEA
JLChambers, Ch., Contract Adm. & Audit Div.
JBHanley (Allen V.Heyl) - USGS
DMEA Files 2

Form M[illegible]-104 (Rev.)
(April 1952)

DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration
Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.
RECEIVED
JUL 3 0 1953

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of [illegible], 195[illegible] Docket No. DMEA [illegible] Contract No. [illegible]
Operator's Name [illegible] Minerals [illegible]
Address [illegible]
Contract Amount, $ 32,600.00 Government Participation: 75 % Amount, $ 29,700.00

ITEMS OF COSTS [illegible]	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling						
Bulldozing [illegible]	[illegible]	[illegible]	[illegible]			
Crosscutting						
Drifting						
[illegible]	[illegible]	[illegible]	[illegible]			
(2) Labor and Supervision:						
Labor [illegible]	[illegible]	[illegible]	[illegible]			
Supervision	[illegible]	[illegible]	[illegible]			
Technical Services [illegible]	[illegible]	[illegible]	[illegible]			
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
[illegible]	[illegible]	[illegible]	[illegible]			
(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	None	[illegible]	[illegible]			
Liability Insurance	[illegible]	[illegible]	[illegible]			
(8) Contingencies (specify):						
TOTALS		[illegible]	[illegible]			

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

Date July 30, 1953 *Payee [illegible]

Per John B. [illegible] Title [illegible]

*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:

$ None

Signature F. R. Kantner, Adm. Asst.
(Authorized Certifying Officer)

Date 7/28/53 Vou. No. None
(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. E-374 in accordance with the terms of the contract.

Signature R. W. Ritchie Title Secretary Date 7/23/53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature W. T. Miller Title Executive Officer Date 7/28/53

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GPO 83-38476

Form MF-104
(April 1952)

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 30 1953

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of [illegible] 195[illegible] Docket No. DMEA [illegible] Contract No. [illegible]
Operator's Name [illegible] Minerals [illegible]
Address [illegible]

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
[illegible] 1								
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching [illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Test Pits	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Roads and Trails								
Total Distributed Costs		[illegible]		[illegible]				Total Costs Authorized by Contract
Operating Equipment Purchased					[illegible]			[illegible]
Initial Rehabilitation and Repairs					[illegible]			[illegible]
New Buildings, Improvements, etc.								
Total Costs								[illegible]

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 [illegible] Operator [illegible]

Per John B. Sein's Title [illegible]

Remarks:

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

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205676

OLD DOMINION MANGANESE COMPANY, INC.

STAR TANNERY, VIRGINIA

CONTRACT Idm - R-374

NARRATIVE:

During June ore from the south extension of the open-cut on the crest and from the vicinity of Dozer Trench N 3 was mined and milled.

Plans were initiated for increasing the rate of mill production so as to build up working capital. This is necessary before further operations under this Contract can take place.

OLD DOMINION MANGANESE COMPANY, INC.

John B. Lewis

President

DMEA
Summary Report
June 30, 1953

Operator:	Old Dominion Manganese Co., Inc.
Address:	Room 2100, 52 Wall Street, New York 5, N.Y.
Mine & Location:	Mineral Ridge Mine, Star Tannery, Va. Shenandoah & Frederick Cos., Va.
Docket No.:	DMEA-2359
Contract No.:	Idm-E374
Commodity:	Manganese
Total Cost:	$39,600.00
Government Participation:	75% - $29,700.00
Duration of Contract:	July 29, 1952 to January 29, 1954

The purpose of this project is to further exploration of an old mining property in northern Virginia. The proposed work has been divided into two stages. Stage I covers the cutting of a maximum of 30 trenches by bulldozer across the outcrop of residual ore zone, sampling exposed bedrock of the mineralized zone and sinking a maximum of 30 test pits in trenches to a depth of 10 feet each. Stage II covers underground exploration by extending present drift faces on No. 6 tunnel level a maximum combined distance of 1,000 feet in one or both directions. The estimated cost of Stage I is $9,000.00 and the cost of Stage II is estimated at $30,600.00.

As of June 30, 1953, Stage I was completed with 10 trenches south of the main opencut workings and 14 trenches north of the opencut workings. Also, 14 test pits were sunk from the bottom of the trenches north of the opencut and one pit from the bottom of a trench south of the opencut. The trenching totaled 2,363 feet averaging 8.5 feet deep and 10 feet wide. The test pits are 5 feet wide and 8 feet long with an average depth of 10 feet. All trenches and test pits were sampled. The exploratory trenches and test pits north of the main opencut exposed good manganese mineralization, but the work south of the opencut is not encouraging.

Results of exploration under Stage I indicate 166,000 tons of ore averaging 20.26 percent manganese at a total cost of $6,177.22. The Government's participation is $4,632.91.

Stage II of this contract is delayed pending results of milling tests being conducted by the operator.

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

DEPARTMENT OF THE INTERIOR
Defense Minerals
RECEIVED
JUL 2 1953

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of May 1953 Docket No. DMEA 2359 Contract No. Idm-E-374
Operator's Name OLD DOMINION MANGANESE COMPANY, INC. Minerals Manganese
Address STAR TANNERY, VIRGINIA
Contract Amount, $ 39,600. Government Participation: 75% Amount, $ 29,700.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling						
Bulldozing Trenches	None	$4,200.00	$4,200.00			
Crosscutting						
Drifting						
Test Pits	None	750.00	750.00			
(2) Labor and Supervision:						
Labor Assayer	None	214.00	214.00			
Supervision	None	710.00	710.00			
Technical Services Consult.	None	175.00	175.00			
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
Laboratory Supplies	None	46.50	46.50			
(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	None	42.93	42.93			
Liability Insurance	None	8.79	8.79			
(8) Contingencies (specify):						
TOTALS		$6,177.22	$6,177.22			

I certify that the above bill is correct and just and that payment therefor has not been received.
Date June 15, 1953 *Payee OLD DOMINION MANGANESE COMPANY, INC.
Per John B. Lewis Title President

*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:

$ None

Signature F. R. Kantner, Adm. Asst.
(Authorized Certifying Officer)

Date 6/30/53 Vou. No. None
(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. E 374 in accordance with the terms of the contract.

Signature [illegible] Burmeister Title Mining Eng. Date 6/24/53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature W. P. Miller Title Executive Officer Date 6/24/53

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GPO 83-38476

Form MF-104A
(April 1952)

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 2 1953

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of May 1953 Docket No. DMEA 2359 Contract No. Ida-3-374
Operator's Name OLD DOMINION MANGANESE COMPANY, INC. Minerals Manganese
Address STAR TANNERY, VIRGINIA

OPERATION Stage 1	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 Dozer	1	None		$4,746.39	24	197.76	30	212.50
Test Pits	1	None		1,430.83	15	95.39	30	90.83
Roads and Trails								
TOTAL DISTRIBUTED COSTS		None		6,177.22				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased					Stage 1			69,000.
Initial Rehabilitation and Repairs					Stage 2			30,600.
New Buildings, Improvements, etc								
TOTAL COSTS								99,600.

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.

REMARKS:

Date June 15, 1953 Operator OLD DOMINION MANGANESE CO., INC.

Per John B. Lewis Title President

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

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205676

OLD DOMINION MANGANESE COMPANY, INC.

STAR TANNERY, VIRGINIA

CONTRACT Idm - E-374

NARRATIVE:

During May a new settling pond for the slimes was constructed and a cone crusher was installed to replace the secondary jaw crusher.

Studies for underground exploration were continued. No operations took place under this contract.

OLD DOMINION MANGANESE COMPANY, INC.

John B. Lewis

President

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 8 1953

May 8, 1953

Memorandum

To: George C. Selfridge, Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region VIII

Subject: Docket No. DMEA-2359 - (Manganese)
Old Dominion Manganese Company
Mineral Ridge Mine, Shenandoah and
Frederick Counties, Virginia
Contract No. Idm-E374

Attached hereto are three photostat copies of a letter from the Old Dominion Manganese Company, explaining the present status of the project.

W. T. Millar

W. T. Millar

Encs.

OLD DOMINION MANGANESE COMPANY
INCORPORATED
STAR TANNERY, VIRGINIA

PLEASE REPLY TO:
ROOM 2100, 52 WALL STREET
NEW YORK 5, N. Y.
TEL: DIGBY 4-3644

May 4, 1953

Mr. W. T. Millar, Acting Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration Administration, Region VIII
College Park, Maryland

RE: Docket No. DMEA-2359
Contract No. Idm-E-374

Dear Mr. Millar:

Referring to my letter of April 22, 1953, we had our meeting on April 30th at Mineral Ridge and are having a survey and engineering estimate of an alternate plan for underground exploration made.

You will be advised as soon as possible after these are completed.

In the meantime, we have had to make a new waste disposal settling pond which has interrupted milling operations, which in turn delays our ability to finance exploration work.

It is hoped to resume milling operations next week.

Sincerely yours,

OLD DOMINION MANGANESE COMPANY, INC.

John B. Lewis
President

JBL:s

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of April, 1953 Docket No. DMEA 2359 Contract No. Idm-E-374
Operator's Name OLD DOMINION MANGANESE COMPANY Minerals Manganese
Address STAR TANNERY, VIRGINIA
Contract Amount, $ 39,600. Government Participation: 75 % Amount, $ 29,700.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling						
Bulldozing Trenches	None	$4,200.00	$4,200.00			
Crosscutting						
Drifting						
Test Pits	None	750.00	750.00			
(2) Labor and Supervision:						
Labor Assayer	None	214.00	214.00			
Supervision	None	740.00	740.00			
Technical Services Consult.	None	175.00	175.00			
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
Laboratory Supplies	None	46.50	46.50			
(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	None	42.93	42.93			
Liability Insurance	None	8.79	8.79			
(8) Contingencies (specify):						
TOTALS		$6,177.22	$6,177.22			

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

Date May 15, 1953 *Payee OLD DOMINION MANGANESE COMPANY, INC.

Per John B. Davis Title President

*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:

$ None

Signature F. R. Kantner, Adm. Asst.
(Authorized Certifying Officer)

Date 6/30/53 Vou. No. None
(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. E 374 in accordance with the terms of the contract.

Signature R. L. Burmeister Title Mining Eng. Date 6/24/53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature W. P. Miller Title Executive Officer Date 6/24/53

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GPO 83-38476

Form MF-104A
(April 1952)

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

Defense Minerals Administration
RECEIVED
1953

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of April 1953 Docket No. DMEA 2359 Contract No. Idm-E-374
Operator's Name OLD DOMINION MANGANESE COMPANY, INC. Minerals Manganese
Address STAR TANNERY, VIRGINIA

OPERATION Stage 1	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 Dozer	1	None		$4,746.39	24	197.76	30	212.50
Test Pits	1	None		1,430.83	15	95.39	30	90.83
Roads and Trails								
TOTAL DISTRIBUTED COSTS		None		6,177.22				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased					Stage 1			$ 9,000.
Initial Rehabilitation and Repairs					Stage 2			30,600.
New Buildings, Improvements, etc.								
TOTAL COSTS								$39,600.

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 May 15, 1953 Operator OLD DOMINION MANGANESE CO., INC.

Per John B. Lewis Title President

REMARKS:

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

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205676

OLD DOMINION MANGANESE COMPANY, INC.

STAR TANNERY, VIRGINIA

CONTRACT Idm - E-374

NARRATIVE:

During April ore from the south extension of the open-cut was milled and shipped and engineering studies for underground exploration were commenced.

No operations took place under this contract.

OLD DOMINION MANGANESE COMPANY, INC.

John B. Lewis

President

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

April 28, 1953

Memorandum

To: George C. Selfridge, Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region VIII

Subject: Docket DMEA-2359 - (manganese)
Old Dominion Manganese Co., Inc.
Mineral Ridge Mine, Frederick & Shenandoah Cos., Va.
Contract Idm-E374

Transmitted herewith in quadruplicate is H. L. Burmeister's Field Engineer's Report of April 27, on subject contract.

W. T. Millar

W. T. Millar

Enclosures - 4

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 28 1953

C O P Y 400

OLD DOMINION MANGANESE COMPANY
Incorporated
Star Tannery, Virginia

Please reply to:
Room 2100, 52 Wall Street
New York 5, N. Y.
Tel: Digby 4-3644

April 22, 1953

Mr. W. T. Millar, Acting Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration Administration, Region VIII
College Park, Maryland

RE: Docket No. DMEA-2359
Contract No. Idm-E-374

Dear Mr. Millar:

The enclosed report for March has been delayed until we could set the date for the meeting on next Wednesday when our consultant can next visit the mine.

As we have run out of copies of Form MF-104, all but the original is on blank paper.

Kindly send a supply of this form. We have thirty copies of Form MF-104A but none of MF-104.

Sincerely yours,

OLD DOMINION MANGANESE COMPANY, INC.

/s/ John B. Lewis
President

JBL:s
Encs.

MF-104
Mark

OLD DOMINION MANGANESE COMPANY, INC.

STAR TANNERY, VIRGINIA

CONTRACT Idm - E-374

NARRATIVE:

During March no operations under this Contract took place.

Activities were confined to milling ore obtained from the south extension of the open-cut on the crest during the first week and last two days, rebuilding the wornout log washer during the interval between.

Our plans are (1) to build up working capital (which has been depleted because of this shut-down) from sales of surface mined ore and (2) determine our plan of action under Stage 2 of this Contract at a meeting scheduled for April 29, 1953 at the mine with our Consulting Mining Engineer.

OLD DOMINION MANGANESE COMPANY, INC.

John B. Lewis

President

Mar. 1953

DMEA
Field Engineer's Report
by
H. L. Burmeister, Engineer
April 27, 1953

Operator:	Old Dominion Manganese Co., Inc.
Address:	Room 2100, 52 Wall St., New York 5, N.Y. Mine address: Star Tannery, Va.
Docket No.:	DMEA-2359
Contract No.:	Idm-E374
Commodity:	Manganese
Total Cost:	$39,600.00
Government Participation:	75% - $29,700.00
Duration of Contract:	18 months - from July 29, 1952 to January 29, 1954

No work was done under this contract during March 1953.

Ore was taken from the south face of the main open cut and test milled during seven days of the month. This ore was taken from an area excluded from the contract.

A decision regarding the starting of Stage II is expected to be reached by the company on April 29.

H. L. Burmeister
Mining Engineer

College Park, Md.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 28 1953

Form MF-104

OPERATOR'S MONTHLY REPORT AND VOUCHER

March 3 2359 Idm-E-374

OLD DOMINION MANGANESE COMPANY
STAR TANNERY, VIRGINIA

Manganese

39,600. 75 29.700.00

Trenches	None	$4,200.00	$4,200.00
Test Pits	None	750.00	750.00
Assayer	None	214.00	214.00
Supervision	None	740.00	740.00
Consult.	None	175.00	175.00
Laboratory Supplies	None	46.50	46.50
Payroll taxes	None	42.93	42.93
Liability insurance	None	8.79	8.79
		$6,177.22	$6,177.22

April 15,1953

OLD DOMINION MANGANESE COMPANY,INC.
John B. Senius
President

$ None

Signature F. R. Kantner, Adm. Asst.
Finance Officer

Date 4/29/53 Vou. No. None

(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 DMEA project under Contract No. Idm-E 374 in accordance with the terms of the contract. W. A. Burmeister Min. Eng. 4/24/53

Approval by DMEA Executive Officer or Alternate:

Signature W. P. Miller Title Executive Officer Date 4/24/53

C
O
P
Y

OLD DOMINION MANGANESE COMPANY
Incorporated
Star Tannery, Virginia

Please reply to:
Room 2100, 52 Wall Street
New York 5, N. Y.
Tel: Digby 4-3644

April 22, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 1 1953

Mr. W. T. Millar, Acting Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration Administration, Region VIII
College Park, Maryland

RE: Docket No. DMEA-2359
Contract No. Idm-E-374

Dear Mr. Millar:

The enclosed report for March has been delayed until we could set the date for the meeting on next Wednesday when our consultant can next visit the mine.

As we have run out of copies of Form MF-104, all but the original is on blank paper.

Kindly send a supply of this form. We have thirty copies of Form MF-104A but none of MF-104.

Sincerely yours,

OLD DOMINION MANGANESE COMPANY, INC.

/s/ John B. Lewis
President

JBL:s
Encs.

OLD DOMINION MANGANESE COMPANY, INC.

STAR TANNERY, VIRGINIA

CONTRACT Idm - E-374

NARRATIVE:

During March no operations under this Contract took place.

Activities were confined to milling ore obtained from the south extension of the open-cut on the crest during the first week and last two days, rebuilding the wornout log washer during the interval between.

Our plans are (1) to build up working capital (which has been depleted because of this shut-down) from sales of surface mined ore and (2) determine our plan of action under Stage 2 of this Contract at a meeting scheduled for April 29, 1953 at the mine with our Consulting Mining Engineer.

OLD DOMINION MANGANESE COMPANY, INC.

John B. Lewis

President

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

March 11, 1953

DEPARTMENT OF THE INTERIOR
Defense M

MAR 12 1953

Memorandum

To: George C. Selfridge, Chairman, Operating Committee, DMEA

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

Subject: Old Dominion Manganese Co., Inc., Mineral Ridge Mine
Shenandoah & Frederick Counties, Virginia
Contract Idm-E374, Docket DMEA-2359 - (Manganese)

Transmitted herewith in quadruplicate is H. L. Burmeister's Field Inspection Report for the month of February, 1953, on subject contract.

W. T. Millar

W. T. Millar

Enclosures - 4

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 12 1953

DMEA
Field Inspection Report
by
H. L. Burmeister, Engineer
March 6, 1953

Operator:	Old Dominion Manganese Co., Inc.
Address:	Room 2100, 52 Wall Street, New York, N.Y.
Location:	Shenandoah & Frederick Cos., Virginia
Docket No.:	DMEA-2359
Contract No.:	Idm-E374
Commodity:	Manganese
Total Cost:	$39,600.00
Government Participation:	75% - $29,700.00
Duration of Contract:	From July 29, 1952 to January 29, 1954

This property was visited on March 6, 1953. All information was received from Mr. T. Carter, Supt. No work was done under this contract during the months of January and February nor to date of this report in March.

During part of January and several days in February the company stripped a small area in the ore zone at the south end of the old working pit. This was done to procure ore for a mill test. Weather conditions and lack of mill parts have greatly retarded these tests which are still in process at this date, but nearly completed. The ore for this mill testing was mined from the section which is exempted in the DMEA exploration contract and is not subject to royalty payments.

Records of the mill runs are inadequate because all of the the records are not kept at the mine. Much of the data is kept in the New York office. It was, however, possible to make some calculations and interpolations which result in the following data, which although necessarily not accurate are significant:

The mill operated one shift per day.

Ore mined and milled Feb. 9 to Feb. 27	-	1,555 tons
Heavy media concentrates produced	-	65 "

From a separate 25 ton test it was found that 8 percent of the ore, screened before heavy media concentration, is minus 6-mesh and assays 23.6 percent manganese. This product would amount to 124 tons out of the 1,555 tons, but is not now concentrated. As this contains a high percentage of waste, also much of the contained manganese will pass a 20-mesh screen, it is believed that a 16 percent salable recovery on tables is a generous estimate. A concentration ratio of 18 to 1 is indicated.

The 65 tons of heavy media concentrates sampled and assayed at the mine, ran 48.06 percent manganese. No phosphorus assays were made but previous assays of this grade of concentrate indicate it should be slightly less than the 0.3 percent allowable.

The ratio of iron to manganese on one car load is reported as 1 to 9, which indicates an iron content of about 5 percent, which is well within the 16 percent allowable. This checks well with a sample 41 percent manganese concentrate taken in October by the DMEA Field Engineer, which ran approximately 6 percent total iron.

More accurate information on the milling results will be obtained when all of the data are available.

Maps and sections were made from the Brunton survey data during the past month. The section of the work to the north indicates that the percent of contained manganese drops from 20 percent to 6.4 percent between test pits NP-9 and NP-11. This point is approximately 1,150 feet northeast of the northeast face of No. 6 level and about 30 feet lower in elevation than No. 6 cross cut.

Development drifting could be started at this point by the company if they wished to insure winter mining operations.

H. L. Burmeister
Mining Engineer

College Park, Md.
March 11, 1953

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

Defense Minerals Administration
RECEIVED
APR 2 1953

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of February, 1953 Docket No. DMEA 2359 Contract No. Idm-E-374
Operator's Name OLD DOMINION MANGANESE COMPANY, INC. Minerals Manganese
Address STAR TANNERY, VIRGINIA
Contract Amount, $ 39,600.00 Government Participation: 75 % Amount, $ 29,700.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling						
Bulldozing Trenches	None	$4,200.	$4,200.00			
Crosscutting						
Drifting						
Test Pits	None	750.	750.00			
(2) Labor and Supervision:						
Labor Assayer	None	214.	214.00			
Supervision	None	740.	740.00			
Technical Services Consult.	None	175.	175.00			
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
Laboratory Supplies	None	46.50	46.50			
(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	None	42.93	42.93			
Liability Insurance	None	8.79	8.79			
(8) Contingencies (specify):						
TOTALS		$6,177.22	$6,177.22			

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

Date Mar. 15, 1953 *Payee OLD DOMINION MANGANESE COMPANY, INC.

Per John B. Lewis Title President

*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:

$ None

Signature F. R. Kantner, Adm. Asst.
(Authorized Certifying Officer)

Date 3/31/53 Vou. No. None
(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. DM E 374 in accordance with the terms of the contract.

Signature [illegible] Title Mining Engineer Date March 23 1953

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature W. O. Smith Title Executive Officer Date 3/23/53

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GPO 83-38476

OLD DOMINION MANGANESE COMPANY, INC.

STAR TANNERY, VIRGINIA

CONTRACT Idm - E-374

NARRATIVE:

During February 1953 operations under this Contract were suspended pending completion of mill tests.

Improvements being made to the mill were completed in the first week and the last three weeks in the month were occupied with milling ore obtained from the south extension of the open-cut on the crest.

This resulted in enough H M S concentrate to ship two (2) carloads to the U. S. Government under its Domestic Purchase Program on March 2, 1953.

As soon as we are advised as to its acceptance by the Government, we will proceed (1) with our financing and (2) plan for action under this Contract.

OLD DOMINION MANGANESE COMPANY, INC.

John B. Lewis

President

Form [illegible] (Rev.)
(April 1952)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 27 1953

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of January 3 1953 Docket No. DMEA 2359 Contract No. Idm-B374
Operator's Name OLD DOMINION MANGANESE COMPANY, INC. Minerals Manganese
Address STAR TANNERY, VIRGINIA
Contract Amount, $ 39,600.00 Government Participation: 75% Amount, $ 29,700.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling Trenches	None	$4,200.	$4,200.00			
Bulldozing						
Crosscutting						
Drifting Test Pits	None	750.	750.00			
(2) Labor and Supervision: Assayer	None	214.	214.00			
Labor	None	740.	740.00			
Supervision Consult.	None	175.	175.00			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
Laboratory Supplies	None	46.50	46.50			
(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	None	42.93	42.93			
Liability Insurance	None	8.79	8.79			
(8) Contingencies (specify):						
TOTALS		$6,177.22	$6,177.22			

I certify that the above bill is correct and just and that payment therefor has not been received.
Date Feb. 15, 1953 *Payee OLD DOMINION MANGANESE COMPANY, INC.
Per John B. Senius Title President

*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:
$ None
Signature F. R. Kantner, Adm. Asst.
(Authorized Certifying Officer)
Date 2/26/53 Vou. No. None
(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. E-374 in accordance with the terms of the contract.

Signature R. L. Burmeister Title Mining Eng. Date 2/26/53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature W. P. Miller Title Deputy Exec. Officer Date 2/26/53

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GPO 83-38476

OLD DOMINION MANGANESE COMPANY, INC.

STAR TANNERY, VIRGINIA

CONTRACT Idm - E-374

NARRATIVE:

During January 1953, operations under the contract were suspended because of delays in receipt of parts needed to put the mill in operation, which has upset our schedule of

(a) Mill Tests

(b) Concentrate sales

(c) Additional financing

each step dependent upon completion of its predecessor.

The mill resumed operations on February 9th and it is hoped that step (a) will be completed in February.

OLD DOMINION MANGANESE COMPANY, INC.

President

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 20 1953

College Park, Maryland

February 20, 1953

Mr. John B. Lewis, President
Old Dominion Manganese Co., Inc.
Room 2100, 52 Wall Street
New York 5, N. Y.

Subject: Docket No. DMEA-2359
Contract No. Idn-E374

Dear Mr. Lewis:

To date we have not received the Monthly Progress Report for January on the above contract.

Although no work may have been done under a DMEA contract, the usual monthly progress report is required for the Government's records. In this case Form MF-104 will show no cost for the current month and the totals to date will be the same as those on the last previous report under which work was done. The narrative section of the report should state why operations are not progressing under the contract.

The report for January was due in this office on February 15, so it can be transmitted not later than February 20. Please submit this report as soon as possible.

If starting Stage II is to be delayed for an appreciable time, it will be necessary to supply reasons for this, which if accepted must be incorporated in an amendment to the contract.

It was understood on January 30 that on completion of a mill run, this office would be advised of your plans.

Very truly yours,

W. T. Millar, Acting Executive
Officer, Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII

WTM:HLBurmeister:rwa

copy for GeoCSelfridge - 2
FRKantner, Finance Office
JBHanley, USGS
DMEA Files 2

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 27 1953

February 26, 1953

Jan MF-104

WSM

Memorandum

To: George C. Selfridge, Chairman, Operating Committee, DMEA

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

Subject: Old Dominion Manganese Co., Inc., Star Tannery, Va.
Contract Idm-E374, Docket DMEA-2359 - (Manganese)

Transmitted herewith are two copies of Form MF-104 submitted by the operator.

Exploratory work on this project is suspended temporarily during experimental mill testing by the operator. There was no progress in the exploration, hence no charges. The unit cost shown on the previous MF-104A remains the same.

W. T. Millar

W. T. Millar

Jan MF-104

Enclosures - 2 (With Operator's Narrative)

DMEA
Summary Report
January 28, 1953

Operator:	Old Dominion Manganese Co., Inc. Mineral Ridge Mine, Star Tannery, Va.
Address:	Room 2100, 52 Wall St., New York 5, N.Y.
Location:	Shenandoah & Frederick Cos., Virginia
Docket No.:	DMEA-2359
Contract No.:	Idm-E374
Commodity:	Manganese
Total Cost:	$39,600.
Government Participation:	75% - $29,700.
Duration of Contract:	From July 29, 1952 to January 29, 1954

The purpose of the project is to further exploration of an old manganese mining property in northern Virginia. The proposed work has been divided into two stages. Stage I covers the cutting of a maximum of 30 trenches by bulldozer across the outcrop of residual ore zone, sampling exposed bedrock ore zone and sinking a maximum of 30 test pits in trenches to a depth of 10 feet each. Stage II covers underground exploration by extending present drift faces on No. 6 tunnel level a total maximum combined distance of 1,000 feet in one or both directions. The estimated cost of Stage I is $9,000. and the cost of Stage II is estimated at $30,600.

As of January 1, 1953, Stage I has been completed with 24 bulldozed trenches and 15 test pits. Fourteen trenches encountered the mineral zone and the results are encouraging.

Total cost of Stage I to date is $6,177.22 of which Government participation is $4,632.91.

Stage II of the project has not been started. As rehabilitation of No. 6 tunnel level is to be done solely at the operator's expense, an outline of the operator's plans is presently expected.

Standard Form No. 10[illegible]—Rev.
Form approved by
Comptroller General, U. S.
May 26, 1938
(Amended August 15, 1941)

PUBLIC VO[illegible]ER FOR PURCHASES AND SERVICES OTHER [illegible]N PERSONAL

D. O. Vou. No. _____
Bu. Vou. No. _____

GENERAL ACCOUNTING OFFICE PREAUDIT
Certified for payment in the sum of $_____
Comptroller General of the United States
By _____

U. S. Department of the Interior, Bureau of Mines
(Department, bureau, or establishment)
Voucher prepared at Pittsburgh, Pa. 1/27/53
(Give place and date)
THE UNITED STATES, Dr.,
To Old Dominion Manganese Co. Inc.
(Payee)
Address Star Tannery, Virginia
Payee's Account No. _____

PAID BY
(For use of Paying Office)

No. and Date of Order	Date of Delivery or Service	Articles or Services (Enter description, item number of contract or general supply schedule, and other information deemed necessary) Terms _____% Discount Cash _____ days	Quantity	Unit Price Cost	Unit Price Per	Amount Dollars	Amount Cts.
		Brought forward from continuation sheet(s)					
Idm-E-374	Oct. 1952	To reclaim items of expense suspended from October Monthly Progress Report					
		Salaries..... 500.00					
		Taxes & insurance... 21.68					
		Supplies..... 24.70				546	38
		(Transcript of payrolls and laboratory supplies issues attached)					
		(See Sch. DMEA-16, D. O. voucher No. 31620, paid 12/3/52)					

Shipped from _____ to _____ Weight _____ Government B/L No. _____ Total 546 38

Payee Old Dominion Manganese Co. Inc.
Per /s/John B. Lewis Title President

(Payee must NOT use this space)
Differences Deduct 25%; Government participation equals 75% 136 59
Account verified; correct for 409 79
(Signature or initials) E.L.R.

Contract No. Idm-E-374 Date 7/29/52 Req. No. _____ Date _____ Invoice Rec'd _____

Approved for $409.79

MEMORANDUM

F. R. Kantner /s/ F. R. Kantner
Authorized Certifying Officer
Feb. 3, 1953

ACCOUNTING CLASSIFICATION (for completion by Administrative Office)

Appropriation, limitation, or project symbol	Appropriation title	Limit'n or Proj't Amount	Appropriation Amount
14X4401	Revolving Fund, Defense Production Act, Interior	$409.79	$409.79

Allotment symbol	Amount	Obligations liquidated	Cost Account Symbol	Cost Account Amount	Objective Classification Symbol	Objective Classification Amount
					07	

Paid by { Check No. _____ dated _____, 19____, for $_____ } on Treasurer of the United States in favor of payee named above.
{ Cash, $_____, on _____, 19____, Payee _____ }
(Sign original only)

* 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.
† If the ability to certify and authority to approve are combined in one person, one signature only is necessary; otherwise the approving officer will sign in the blank space below "Approved for $_____", and over his official title.

16—22900a-1

Per _____
Title _____

METHOD OF OR ABSENCE OF ADVERTISING

(Section 3709 of the Revised Statutes)

1. After advertising in newspapers.

2. (*a*) After advertising by circular letters sent to _____ dealers.

(*b*) And by notices posted in public places.

(If notices were not posted in addition to advertising by circular letters sent to dealers, explanation of such omission must be made. The notation on the certificate on the face of the voucher must be "2(*a*)(*b*)" or "2(*a*)", depending on whether or not notices were posted.)

3. Without advertising, under an exigency of the service which existed prior to the order and would not admit of the delay incident to advertising.

4. Without advertising in accordance with _____

5. Without advertising, it being impracticable to secure competition because of _____

_____

_____

_____

_____

(Here state in detail the nature of the exigency or circumstances under which the securing of competition was impracticable under 3 and 4)

NOTE.—The above form "Method of or Absence of Advertising" is to be used when purchases are made or services secured under proper authority without written agreement in any form. In case of a written agreement (formal contract, proposal, and acceptance, or less formal agreement) Standard Form No. 1036—Revised should be used for abstracting the method of or absence of advertising and award of contract. (See General Regulations No. 51, Supplement No. 6, General Accounting Office, Aug. 20, 1930.)

U.S. GOVERNMENT PRINTING OFFICE: 1946 O-88934

16—22900-1

OLD DOMINION MANGANESE COMPANY, INC.
STAR TANNERY, VA.

CONTRACT Idm - E - 374

Stage 1 October 1952

ITEM	Units	Unit Costs	Cost Paid or Reported	Costs Oct. 1952	Costs to Nov. 1952	Estimated Costs	Unexpended Balance
Bulldozer Trenches	24	$175.00	None	$4,200.00	$4,200.00	$5,250.00	$1,050.00
Test Pits	None	50.00	None	None	None	1,500.00	1,500.00
Engineer Supervisor	----	----	None	300.00	300.00	1,200.00*	,900.00
Assayer	----	----	None	100.00	100.00	300.00*	200.00
Consultant	----	----	None	100.00	100.00	400.00*	300.00
Laboratory Supplies	----	----	None	24.70	24.70	100.00*	75.30

Transcript of Costs:			Paid by Co.	% this Contract Time	
1.	T. Carter, Supt.	1 mo. @ $350.00	350.00	86%	$300.00
	Payroll Taxes	4.5%	15.75	"	13.50
	Liability Ins.	0.9209/$100	3.22	"	2.76
					[redacted]
2.	M. Carter, Assayer	18 days @ $6.00	108.00	100%*	100.00*
	Payroll Taxes	4.5%	4.86	"	4.50
	Liability Ins.	0.9209/$100	.99	"	.92
					$105.42
3.	C. M. Smith, Consultant	1 day @ $100.00	100.00	100%	100.00
					$100.00
4.	Laboratory Supplies	26 Mn Assays @ $.80			20.80
		13 Fe " @ .30			3.90
					$24.70**

Note: * Maximum allowed under this contract

** Laboratory Supplies used in Mn and Fe assays were drawn from our supplies and have been estimated to cost $.80 and $.30 for the Mn and Fe assays respectively. It is not possible to show invoices for each item as the quantities used were not necessarily the same as the quantities purchased during the month.

OLD DOMINION MANGANESE COMPANY, INC.
/s/ John B. Lewis President

COPY

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Central
Experiment Station

4800 Forbes Street
Pittsburgh 13, Pennsylvania

November 26, 1952

Old Dominion Manganese Co., Inc.
Star Tannery, Va.

Gentlemen:

Your October 1952 Operator's Monthly Report and Voucher for $4,755..02, submitted in connection with your Contract Idm-E-374, is being scheduled for payment today in the net amount of $3,150.00 (75% of $4,200.00 - 24 trenches at a unit cost of $175.00).

Payment of items (2), (3), and (7) has been withheld since your voucher has not been documented by transcripts of pay rolls for labor and supervision, nor by originals or certified copies of invoices for purchase of supplies. You may reclaim these items on a subsequent voucher by furnishing the necessary documents.

Very truly yours,

D. N. Anderson
Chief, Budget & Finance Branch
Region VIII

cc:
HPG reading file
W. T. Millar (College Park)
Audits - DMEA file
WFO/o

MO Voucher No. [illegible]

Bureau of Mines

College Park, Md. 14-23-080 448

DMEA-25

Paid by
I. Carrelco
Symbol [illegible]
Feb. 6, 1953

14X4401 $409.79

Check No.
19013835

Old Dominion Manganese Co., Inc.
Star Tannery, Virginia $409.79

Contract Idm-E374

$409.79

Feb. 3, 1953

F. R. Kontnor, Administrative Assistant

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 20 1953

October 19, 1953

Memorandum

To: George C. Selfridge, Chairman, DMEA Operating Committee

From: Executive Officer, DMEA Field Team, Region VIII

Subject: Docket No. DMEA-2359 - (Manganese)
Mineral Ridge Mine, Old Dominion Manganese Co.,
Shenandoah & Frederick Counties, Virginia
Contract No. Idm-E374

Enclosed are two copies of a supplemental voucher for the subject contract, requested by Mr. Talbert.

W. T. Millar

W. T. Millar

Enclosures

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 28 1953

January 27, 1953

Memorandum

To: George C. Selfridge, Chairman, Operating Committee, DMEA

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

Subject: Old Dominion Manganese Co., Inc.
Mineral Ridge Mine, Star Tannery, Va.
Contract Idm-E374, Docket DMEA-2359 - (Manganese)

Transmitted herewith in quadruplicate is H. L. Burmeister's Field Inspection Report on subject contract.

W. T. Millar
W. T. Millar

Attachments - 4

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 28 1953

GCL 1/28/53

DMEA
Field Inspection Report
January 22 and 23, 1953
by
H. L. Burmeister, Engineer

Operator:	Old Dominion Manganese Co., Inc. Mineral Ridge Mine, Star Tannery, Va.
Address:	Room 2100, 52 Wall St., New York 5, N.Y.
Docket:	DMEA-2359
Contract:	Idm-E374
Commodity:	Manganese
Total Cost:	$39,600.
Government Participation:	75% or $29,700.
Duration of Contract:	From July 29, 1952 to January 29, 1954

This project was visited on January 22 and January 23. Work on Step I has been completed. This has consisted of bulldozing 24 trenches across the outcrop and sinking 15 test pits in the bottom of 15 of the trenches which exposed manganese. All of the trenches and test pits to the northeast of the old workings encountered fair manganese mineralization. Trenches to the southwest of the old workings did not encounter mineralization, although all trenches exposed both the hanging wall and footwall structures.

A Brunton survey of the area covered by this contract was made so that a plan and longitudinal section could be plotted.

Mr. Paul J. Bertelsen, the manager, states that the company may not want to enter Step II under the terms specified in the contract. The contract requires rehabilitation of No. 6 level for the account of the operator, after which the Government will participate in driving extensions to the existing drifts for exploratory purposes. Rather, the operator indicates a desire to have the Government participate in the cost of driving a new cross-cut adit to explore the ore under the trenches and test pits.

It was suggested that a letter be written to the Executive Officer outlining the intentions of the company relative to work under this contract.

On January 23, a small shovel started stripping at the southwest end of the old working pit. This area is not included in the contract. The object of this mining is to ascertain what milling results can be obtained.

H. L. Burmeister
Mining Engineer

College Park, Md.
January 26, 1953

400

WSM

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

January 19, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 21 1953

Memorandum

To: George C. Selfridge, Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region VIII

Subject: Docket DMEA-2359 - (Manganese)
Old Dominion Manganese Co., Inc.
Mineral Ridge Mine, Shenandoah & Frederick
Counties, Virginia - Contract Idm-E374

Attached in quadruplicate is the Field Engineer's Report by H. L. Burmeister, on Contract Idm-E374.

W. T. Millar

W. T. Millar

Enclosures - 4

DMEA
Field Engineer's Report
January 19, 1953
H. L. Burmeister, Engineer

Operator:	Old Dominion Manganese Co., Inc. Mineral Ridge Mine, Star Tannery, Va.
Address:	Room 2100, 52 Wall St., New York 5, N.Y.
Docket:	DMEA-2359
Contract:	Idm-E374
Commodity:	Manganese
Total Cost:	$39,600.
Government Participation:	75% or $29,700.
Duration of Contract:	From July 29, 1952 to January 29, 1954

The work on Step I of this contract, which comprised bulldozing trenches and sinking test pits in the trenches, was completed during December 1952. The time allowed by contract was to January 1, 1953.

Unit cost of the bulldozer trenches was well within the authorized limit. The unit cost of the test pits exceeded that authorized due largely to continued inclement weather donditions.

Test pits NP-11, 12, 13 and 14 exposed as expected, low grade manganese mineralization. Test pit SP-3 showed no mineralization. None of the trenches southwest of the old surface mining pit exposed ore although the wall rocks were exposed in each trench.

It is not known at this time whether the Company will continue with Step II of the Contract or not. If they do continue it will make necessary the expenditure of an estimated $16,000. for the company account before the Government participation would start. Definite knowledge regarding the intentions of the Company will probably be at hand within the week.

H. L. Burmeister
Mining Engineer

College Park, Md.
January 19, 1953

xxxxxxxxxxxxxxxxx
College Park, Maryland

January 19, 1953

Mr. John B. Lewis, President
Old Dominion Manganese Co., Inc.
Room 2100, 52 Wall Street
New York 5, N. Y.

Re: Docket DMEA-2359
Contract Idm-E374

Dec 52
W59

Dear Mr. Lewis:

In the December Progress Report on the subject contract, Form 104A, the figure recorded as $1,431.83 should be $1,430.83 as it is on Form MF-104. Also the figure $6,178.22 should be $6,177.22.

The total cost in Step I for engineering and supervision, assaying, consultant, assay supplies, and $250. for contingencies which can be used for payroll taxes and insurance, is $2,250. Using one half of this for trenches and one half for test pits, results in an "Authorized by Contract" cost of $212.50 for bulldozer trenches and $90.83 for test pits.

All the above changes have been penciled on the December reports and you may make the corrections on your file copy for your records.

Very truly yours,

W. T. Millar, Acting Executive
Officer, Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII

WTM:HLBurmeister:rwa

copy for DMEA Files
FRKantner
~~FEJohnson~~ - 2 GeoCSelfridge
DMEA Files

Dec 1952

C
O
P
Y

OLD DOMINION MANGANESE COMPANY
Incorporated
Star Tannery, Virginia

Please reply to:
Room 2100, 52 Wall Street
New York 5, N. Y.
Tel: Digby 4-2644

January 15, 1953

Mr. W. T. Millar, Acting Executive Officer
U. S. Department of Interior, Bureau of Mines
Bureau-Survey Field Team
Defense Minerals Exploration Administration, Region VIII
College Park, Maryland

Re: Docket DMA-2359
Contract Idm-E374

Dear Mr. Millar:

Enclosed are the original and four copies of our report for the month of December 1952.

You will note that the unit cost of the six test pits works out to $87.12 which shows improvement over November's $100. figure in spite of worse weather in December.

Referring to your letter of December 17th, I note Mr. Burmeister used a figure of $1,800. for Stage I overhead. If we add the $250. contingency allowance to the $1,900. for labor, supervision and consultants and $100. operating material and supplies allowances included in the contract, a total authorized maximum of $2,250. results, which would increase the authorized unit cost to $\frac{1500 + 1125}{30} = \$87.50$

I wish to acknowledge receipt of the payment for the month of November in the amount of $681.07.

Sincerely yours,

OLD DOMINION MANGANESE COMPANY, INC.

/s/ John B. Lewis

President

JBL:s
Encs.

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

DEPARTMENT OF THE INTERIOR
Defense Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53
RECEIVED
JAN 30 1953

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

Month of December, 1952 Docket No. DMEA 2359 Contract No. Idm - E - 374
Operator's Name OLD DOMINION MANGANESE COMPANY, INC. Minerals Manganese
Address STAR TANNERY, VIRGINIA
Contract Amount, $ 39,600. Government Participation: 75% Amount, $ 29,700.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling						
Bulldozing Trenches	None	$4,200.00	$4,200.00			
Crosscutting						
Drifting						
Test Pits	$300.00	450.00	750.00			
(2) Labor and Supervision:						
Labor Assayer	60.00	154.00	214.00			
Supervision	140.00	600.00	740.00			
Technical Services Consult.	None	175.00	175.00			
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
Laboratory Supplies	11.90	34.60	46.50			
(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	9.00	33.93	42.93			
Liability Insurance	1.84	6.95	8.79			
(8) Contingencies (specify):						
TOTALS	$522.74	$5,654.48	$6,177.22			

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

Date Jan. 15, 1953 *Payee OLD DOMINION MANGANESE COMPANY, INC.

Per John B. Sauris Title President

*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:

$ 392.06

Signature F. R. Kantner, Adm. Asst.
(Authorized Certifying Officer)

Date 1/29/53 Vou. No. DMEA-23
(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. E-374 in accordance with the terms of the contract.

Signature R. L. Durmeister Title Min. Eng. Date 1/19/53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature W. D. McMillan Title Acting Exec. Officer Date 1/19/53

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 30 1953

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of December 1952 Docket No. DMEA 2359 Contract No. Idm - E - 374
Operator's Name OLD DOMINION MANGANESE COMPANY, INC. Minerals Manganese
Address STAR TANNERY, VIRGINIA

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 Dozer	1	None	None	$4,746.39	24	$197.77	30	~~$206.67~~ 212.50
Test Pits	1	$522.74	6	~~1,431.83~~ 1,430.83	15	95.39	30	~~81.67~~ 90.83
Roads and Trails								
TOTAL DISTRIBUTED COSTS		$522.74		~~$6,178.22~~ 6,177.22				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc								
TOTAL COSTS		$522.74		~~$6,178.22~~ 6,177.22				$39,600.00

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 Jan. 15, 1953 Operator OLD DOMINION MANGANESE CO., Inc.

Per John B. Burns Title President

REMARKS: Unit Costs authorized by Contract are as estimated by Mr. Burmeister

Unit costs authorized are 212.50 for Dozer trenches and 90.83 for Test pits when 25% contingency is used for Ins. & Payroll Taxes.

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

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205676

OLD DOMINION MANGANESE COMPANY, INC.
STAR TANNERY, VA.

CONTRACT Idm - E - 374

Stage 1 December 1952

ITEM	Units	Unit Costs	Cost Price Reported	Costs Dec.	Costs To Date	Estimated Costs	Unexpended Balance
Bulldozer Trenches	24	$175.00	$4,200.00	None	$4,200.00	$5,250.00	$1,050.00
Test Pits	15	50.00	450.00	$300.00	750.00	1,500.00	750.00
Engineer Supervisor	-----	------	600.00	140.00	740.00	1,200.00*	460.00*
Assayer	-----	------	154.00	60.00	214.00	300.00*	86.00*
Consultant	-----	------	175.00	None	175.00	400.00*	225.00*
Laboratory Supplies	-----	------	34.60	11.90	46.50	100.00*	53.50*

Transcript of Costs:

			Paid by Co.	% this Contract	
1.	T. Carter Sup't.	1 mo. @ $350.00	$350.00	40	$140.00
	Payroll Taxes	4.5%	15.75		6.30
	Liability Ins.	0.9209/$100.	3.22		1.29
					$147.59
2.	M. Carter, Assayer	10 days @ $6.00	60.00	100	60.00
	Payroll Taxes	4.5%	2.70		2.70
	Liability Ins.	0.9209/$100.	0.55		0.55
					$63.25
3.	Laboratory Supplies	13 Mn Assays @ $.80	10.40	100	10.40 **
		5 Fe Assays @ $.30	1.50	100	1.50 **
					$11.90 **

Note: * Maximum allowed under this contract

** (As in November Report)

OLD DOMINION MANGANESE COMPANY, INC.

John B. Davis President

OLD DOMINION MANGANESE COMPANY, INC.

STAR TANNERY, VIRGINIA

CONTRACT IDM - E - 374

NARRATIVE:

During the month of December 1952, from the 1st to the 15th, we completed all test pits in Bulldozer trenches Northeast of ore pass Marker. The pits to be completed were Np 9, Np 11, Np12, Np13 and Np 14. All test pits have been sampled and assayed. Pits Np 11 to Np 14 did not show as much ore as pits in trenches from Np 1 to Np 10.

A test pit SP 8 was put in bulldozer trench S 3 on Southwest of ore pass. It showed no ore at all.

All bulldozer trenches and test pits have been completed as authorized by Mr. H. L. Burmeister.

We have also sampled and assayed N face working out.

TRICE CARTER

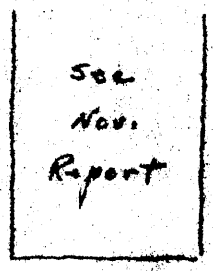
Superintendent

OLD DOMINION MANGANESE COMPANY, INC.

John B. Lewis President

NP-9

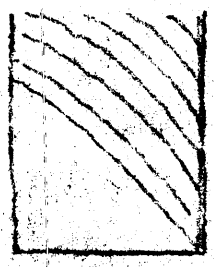
Mn 20.07%
Fe 1.70%



NP-10

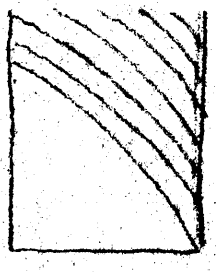
NP-11

Mn 6.35%
Fe 3.17%



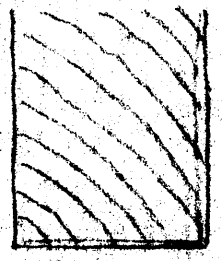
NP-12

Mn 6.06%
Fe 3.56%



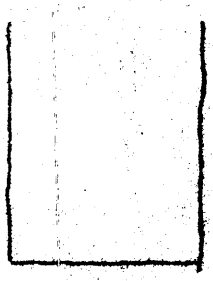
NP-13

Mn 5.51%
Fe 3.71%



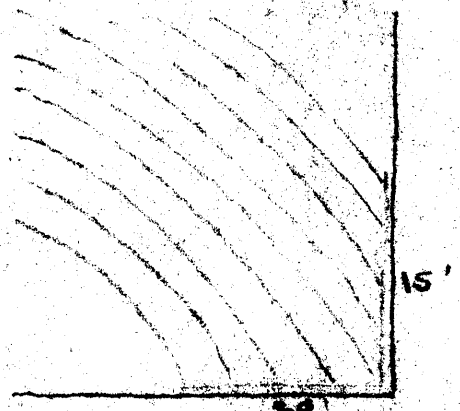
NP-14

Mn 7.71%
Fe 3.94%



SP-3

No Ore



North Face

Mn - 20.43%

OLD DOMINION MANGANESE CO. INC.

Nov 30 to Dec 31, 1954

DMEA Contract Idm-E-374

Stage 1 - Test Pits.

Scale 1/8" = 1'

Docket No. DMEA 2359 - Manganese

Old Dominion Manganese Co.

Stage I

$1,900.00
6,750.00
8,650.00

Trenching

	Trenches	Contract cost	Supervision 1/	Supplies	Total	Unit Cost Contract	Supervision	Assay Supplies	Total
October	24	$4,200.00	521.69	24.70	4746.39	175.00	21.74	1.03	197.77

Test Pits

	T. Pits.								
Nov.	9	450.00	448.19	9.90	908.09	50.00	49.80	1.10	100.90
Dec	6	300.00	200.00	22.74	522.74	50.00	33.33	3.69	87.02

1/ Includes consultants

2359

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

December 4, 1952

Memorandum

To: Frank E. Johnson, Chairman, Operating Committee, DMEA

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

Subject: Old Dominion Manganese Co., Inc. Mineral Ridge Mine
Star Tannery, Virginia - Contract Idm-E374
Docket DMEA-2359 - (Manganese)

Attached in quadruplicate is the Field Inspection Report by H. L. Burmeister, on subject docket for the month of November.

W. T. Millar

W. T. Millar

Attachments - 4

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 4 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 4 1952

DMEA
Field Inspection Report
December 2, 1952
H. L. Burmeister, Engineer

Operator:	Old Dominion Manganese Co., Inc. Mineral Ridge Mine, Star Tannery, Va.
Address:	Room 2100, 52 Wall St., New York 5, N. Y.
Docket No.:	DMEA-2359
Contract No.:	Idm-E374
Commodity:	Manganese
Total Cost:	$39,600.
Government Participation:	75% - $29,700.
Duration of Contract:	18 months - from July 29, 1952 to January 29, 1953

This property was visited December 2, 1952. The engineer was accompanied on the inspection by the Superintendent, Mr. T. Carter.

Digging test pits in the bottom of completed bulldozer trenches was started November 1.

Test pits, from PN-1 to PN-11 are completed with the exception of PN-9. Five more test pits will be sunk. The completion date for this step of the contract is January 2, 1953.

Samples have been cut across the ore zone as exposed in each test completed pit. These samples will be assayed by December 9.

A satisfactory inspection of the test pits was not possible due to about 8 inches of snow on the ground, water in the pits and caving of the walls. In addition to what was visible, Mr. Carter states that with the exception of pits PN-5, PN-6 and PN-10, all the other pits sampled were in ore for the full 10 feet of depth and nearly the full length in the bottom which is 7 feet.

Bulldozer trench TS-3 was taken to a depth of 15 feet without encountering ore.

It is noted that the Progress Report for October charges $100.00 to the project for part time work of the assayer. In this period 30 samples were assayed for manganese and iron.

Step I of this project should be completed not later than December 15.

H. L. Burmeister, Mining Engineer

College Park, Md.
December 4, 1952

BEB
1/7/53

xxxxxxxxxxxxxxxx
College Park, Maryland

December 17, 1952

Mr. Paul J. Bertelsen
Old Dominion Manganese Co., Inc.
Room 2100, 52 Wall Street
New York 5, N. Y.

Subject: Docket No. DMEA-2359
Contract No. Idm-E374

Dear Mr. Bertelsen:

It is noted that the supplemental sheet of costs for November, lists eleven test pits and $550. as the cost for eleven test pits.

Forms MF-104 and MF-104A show nine test pits and $450. as the cost. Also the total monthly cost reflects the amount of $450.

We have penciled the correction on the supplemental cost sheet to read nine test pits at a cost of $450. In order to keep the record clear, please make this change in number of pits and cost on your copy of the supplemental sheet.

Referring now to Form MF-104A which you will note is a Unit Cost report: Column one is correct; column two should be, dozer - none, test pits $908.09, column three is correct; column four should be, dozer $4,746.39 and test pits $908.09; column five is correct; column six should be, dozer $197.77 and test pits $100.90; column seven should be, dozer 30 and test pits 30; column eight should be, dozer $206.67 and test pits $81.67.

Total distributed costs - column one should be $908.09; column two is correct; column three should be $5,654.48. Total Costs, column one should be $908.09 and column three $5,654.48. These corrections have been penciled on the copies submitted and forwarded.

A copy of MF-104A, properly executed for November, is attached for your future guidance.

The unit cost to date of $100.90 for test pits is brought to your attention. The unit cost for test pits allowed by the contract is $81.67. The reason for this unit cost being much higher than that authorized is that overhead is going on and test pits are not being dug partially due to inclement weather. This situation must be corrected in order that the actual unit costs will be kept within the authorized unit costs.

Very truly yours,

W. T. Millar, Acting Executive Officer
Bureau-Survey Field Team
DMEA - Region VIII

WTM:HLBurmeister:rwa

copy for TriceCarter, Supt.
Enclosure DMEA Files

C
O
P
Y

OLD DOMINION MANGANESE CO.
Incorporated
Star Tannery, Virginia

Please reply to:
Room 2100, 52 Wall St.
New York 5, N.Y.
Tel: Digby 4-3644

Mr. W. T. Millar, Acting Executive Officer
U. S. Department of Interior Bureau of Mines
Bureau-Survey Field Team
Defense Minerals Exploration Administration, Region VIII
College Park, Maryland

Dear Mr. Millar:

Referring to DMEA Contract Idm-E-374, we are enclosing our report for the month of November, 1952.

Also enclosed are five (5) copies of the explanatory page supplied with our October 1952 report, amended to include details supporting Items 2, 3 and 7, payment for which has been withheld pending further information.

You will note that Item 7 has been reduced from $33.33 which had been included as 1/3 the total allowable pending completion of cost accounting for laboratory chemicals and other supplies consumed in the assays, to $24.70 as determined by our analysis of their costs.

I wish to acknowledge receipt of payment in the amount of $3,150. for Item 1 of the October 1952 report.

Sincerely yours,

OLD DOMINION MANGANESE COMPANY, INC.

/s/ John B. Lewis
President

JBL:s
Encs.

Nov. 1952

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

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of November, 1952 Docket No. DMEA 2359 Contract No. Idm - E 374
Operator's Name Old Dominion Manganese Co., Inc. Minerals Manganese
Address Star Tannery, Virginia
Contract Amount, $39,600.00 Government Participation: 75 % Amount, $29,700.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling						
Bulldozing Trenches	None	$4,200.00	$4,200.00			
Crosscutting						
Drifting						
Test Pits	$450.00	None	450.00			
(2) Labor and Supervision:						
Labor Assayer	54.00	100.00	154.00			
Supervision	300.00	300.00	600.00			
Technical Services Consultant	75.00	100.00	175.00			
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
Laboratory Supplies	9.90	24.70	34.60			
(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	15.93	18.00	33.93			
Liability Insurance	3.26	3.69	6.95			
(8) Contingencies (specify):						
TOTALS	$908.09	$4,746.39	$5,654.48			

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

Date 12/1/53 *Payee OLD DOMINION MANGANESE COMPANY, INC.

Per John B. Lewis Title President

*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:

$681.07

Signature W. E. Orr, Jr.
(Authorized Certifying Officer)

Date 1/7/53 Vou. No. DMEA-19
(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. E-374 in accordance with the terms of the contract.

Signature H. L. Burmeister Title Min. Eng. Date 12/17/52

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature W. T. Mullar Title Deptty Exec Officer Date 12/17/52

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.

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of November 1952 Docket No. DMEA 2359 Contract No. Idm-E-374
Operator's Name OLD DOMINION MANGANESE COMPANY, INC. Minerals Manganese
Address Star Tannery, Virginia

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				4,746.39		197.77	30	206.67
Trenching Dozer	one	none	none	~~4,200.00~~	24	~~4,200.00~~	~~24~~	~~$175.00~~
Test Pits	one	~~450.00~~	9	~~450.00~~	9	~~450.00~~	30	~~50.00~~
Roads and Trails		908.09		908.09		100.90		81.67
TOTAL DISTRIBUTED COSTS		450.00	9	4,650.00				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		450.00		4,650.00				$39,600.00

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 12/1/52 Operator OLD DOMINION MANGANESE CO., Inc

Per John B. Davis Title President

REMARKS: In addition costs for labor and supervision, laboratory supplies, payroll taxes and liability insurance aggregated $458.09 for November and $1,004.48 to date.

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

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205676

OLD DOMINION MANGANESE COMPANY, INC.
STAR TANNERY, VA.

CONTRACT Idm - E - 374

Stage 1 November 1952

ITEM	Units	Unit Costs	Cost Price Reported	Costs Nov. 1952	Costs to Dec. 1952	Estimated Costs	Unexpended Balance
Bulldozer Trenches	24	$175.00	$4,200.00	None	$4,200.00	$5,250.00	$1,050.00
Test Pits	~~11~~ 7 #13.	50.00	None	~~$550.~~ 450.	~~550.00~~ 450.	1,500.00	~~950.00~~ 1050.
Engineer Supervisor	----	------	300.00	300.00	660.00	1,200.00*	600.00
Assayer	----	------	100.00	54.00	154.00	300.00*	146.00
Consultant	----	------	100.00	75.00	175.00	400.00*	225.00
Laboratory Supplies	------	-------	24.70	9.90	34.60	100.00*	65.40

Transcript of Costs:

			Paid by Co.	% this Time	Contract
1.	T. Carter, Supt.	1 mo. @ $350.00	$350.00	86%	$300.00
	Payroll Taxes	4.5%	15.75	"	13.50
	Liability Ins.	0.9209/$100.	3.22	"	2.76
					$316.26
2.	M. Carter, Assayer	9 days @ $6.00	54.00	100%	54.00
	Payroll Taxes	4.5%	2.43		2.43
	Liability Ins.	0.9209/$100.	0.50		0.50
			56.93		56.93
3.	C. M. Smith Consultant	1 day @ $100.	$100.00	75%	75.00
4.	Laboratory Supplies:	9 Mn Assays @ $.80			7.20
		9 Fe " @ .30			2.70
					$9.90 **

Note: * Maximum allowed under this contract

** Laboratory Supplies used in Mn and Fe assays were drawn from our supplies and have been estimated to cost .80 and .30 for the Mn and Fe assays respectively. It is not possible to show invoices for each item as the quantities used were not necessarily the same as the quantities purchased during the month.

OLD DOMINION MANGANESE COMPANY, INC. John B. Sims President

OLD DOMINION MANGANESE COMPANY, INC.

STAR TANNERY, VIRGINIA

CONTRACT IDM - E - 374

NARRATIVE:

During the month of November 1952 nine test pits were cut in bulldozer trenches on Northeast ridge of property. The accompanying plans show location of test pits.

All pits showed ore from N P 1 to N P 10 with the exception of N P 9. N P 9 was not completed because of water in dozer trench. This leaves N P 9, 11, 12, 13 and 14 to be completed for next report. All pits were very carefully sampled according to Mr. Burmeister's instructions.

TRICE CARDER

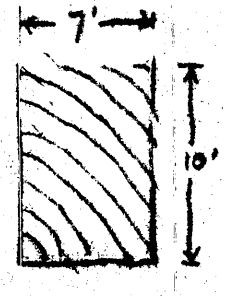
Superintendent

OLD DOMINION MANGANESE COMPANY, INC.

John B. Davis

President

NP-1



10'-7' sample
Mn 15.91%
Fe 1.56%

NP-2

10'-7' sample
Mn 20.95
Fe 4.52

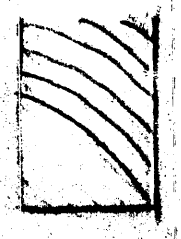
NP-3

10'-6' Sample
Mn 27.16
Fe 1.66

NP-4

9'-0' Sample
Mn 16.71
Fe 1.91

NP-5



10'-0' sample
Mn 11.00
Fe 3.19

NP-6

10'-2' Sample
Mn 13.42
Fe 2.29

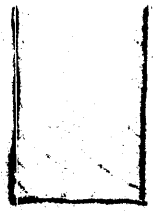
NP-7

10'-7' Sample
Mn 22.15
Fe 1.96

NP-8

10'-4' Sample
Mn 17.11
Fe 2.86

NP-9



No sample
[illegible]
in trench

NP-10

10'-3' Sample
Mn 11.70
Fe 4.37

Old Dominion Manganese Co. Inc.
Oct 31 to Nov 30, 1952
DMEA Contract /dm-E-374
Stage 1 - Test Pits

Scale 1" = 1' T.C.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 14 1952

xxxxxxxxxxxxxxxxxx
College Park, Maryland

November 14, 1952

Memorandum

To: L. N. Anderson, Finance Officer, Region VIII

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

Subject: Monthly Report of Operator - October 2 through October 31, 1952 - Mineral Ridge Mine
Old Dominion Manganese Co., Shenandoah & Frederick Cos., Virginia - Contract Idm-E374, Docket DMEA-2359- (Manganese)

Attached are the original and three copies of the October Progress Report for Contract Idm-E374, for your administrative examination.

Also attached for your files are copies of H. L. Burmeister's Field Inspection Reports, dated September 18, October 9, and October 30, 1952.

L. T. Millar

Attachments

rwa

copies for FEJohnson
DMEA Files 2

FIELD TEAM's Copy
College Park, Md.

C
O
P
Y

OLD DOMINION MANGANESE COMPANY
Incorporated
Star Tannery, Virginia

Please reply to:
Room 2100, 52 Wall Street
New York 5, N. Y.
Tel: Digby 4-3644

November 12, 1952

Area 2351

Mr. W. T. Millar, Acting Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration Administration, Region VIII
College Park, Maryland

Dear Mr. Millar:

With reference to DMEA Contract Idm-E374, we are enclosing the original and four copies of our report for the month of October. We understand Form MF-104 included constitutes a voucher for reimbursement of the Government's 75% share of the costs, or $3,566.26.

Work is now progressing on the test pits which will be reported upon in our November report.

Hoping to hear from you soon,

Sincerely yours,

OLD DOMINION MANGANESE COMPANY, INC.

(signed) John B. Lewis

President

JLB:s
Encs. (5)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

Defense Minerals Administration
NOV 2 - 1952 12/4/52

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of October, 195 2 Docket No. DMEA 2[illegible] Contract No. [illegible]
Operator's Name Old Dominion Manganese Co. Inc. Minerals Manganese
Address Star Tannery, Va.
Contract Amount, $ 50,000.00 Government Participation: 75 % Amount, $ [illegible]

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 Spencher	26,200.00	none	26,200.00	4700.00		
Crosscutting						
Drifting						
(2) Labor and Supervision:						
~~Labor~~ Consulting Inc.	100.00	none	100.00			
Supervision	300.00	none	300.00			
~~Technical Services~~ Analyst	100.00	none	100.00			
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
Laboratory supplies	88.88	none	88.88			
(4) Operating Equipment:						
Rental		29.70				
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes	18.00	none	18.00			
Liability Insurance	3.69	none	3.69			
(8) Contingencies (specify):						
TOTALS	$4,755.02	none	$4,755.02			

Payment withheld - not supported by copies of payrolls and invoices. JPD

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

Date 11/12/52 *Payee Old Dominion Manganese Co Inc

Per John B. Smith Title President

*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:

$ 3150.00

Signature [illegible] (Authorized Certifying Officer)

Date 11/26/52 Vou. No. DMEA-16

(See other side)

Oct. 1952

(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. E-374 in accordance with the terms of the contract.

Signature G. L. Neuman Title Mining Eng. Date 11-14-52

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature W. J. Miller Title Acting Exec. Officer Date Nov. 14, 1952

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.

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 2 0 1952

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of October 195 2 Docket No. DMEA 2559 Contract No. IDM-E-374
Operator's Name Old Dominion Manganese Co. Inc. Minerals Manganese
Address Star Tannery, Va.

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								
Bulldozer trench	trench	$4,200.	24	$4,200.	24	$4,200.	50	$175.00
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		$4,200.	24	$4,200.				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		$4,200.		$4,200.				$35,000.

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

Date 11/12/52 Operator Old Dominion Manganese Co Inc

Per John B. Bowie Title President

REMARKS:

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

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205676

Old Dominion Manganese Co. Inc.

Star Tannery Va.

Contract IBM-2-374

Narrative

During the month of October 1952, twenty-four bulldozer trenches were cut across the outcrop of the vein. Fourteen of these trenches are on the northeast extention of the outcrop and ten are on the southwest extention of the outcrop. The accompanying plan shows the location of the trenches. Trenches N-1 being one hundred ft. northeast of main pit face and also five hundred thirty ft. northeast of ore pass marker.

The trenches vary greatly in length and depth due to terrain and hardness of material. The average depth of sample level approximates eight ft. All trenches on the northeast extention cut mineralization with the exception of N-9. Only four of the trenches to the southwest cut mineralization. All of the twenty-four trenches have exposed the ore zone from hanging wall of sandstone to limestone on the footwall.

Trenching has been completed on the northeast due to terrain and hardness of material and the southwest because of finding no mineralization and difficulty in terrain.

Sinking test pits in the bottom of bulldozer trenches will begin in several days. All equipment is on the ground.

TRIGG CARTER

Superintendent

Old Dominion Engineers Co. Inc.

Star Canyon, Va.

Contract [illegible]-376

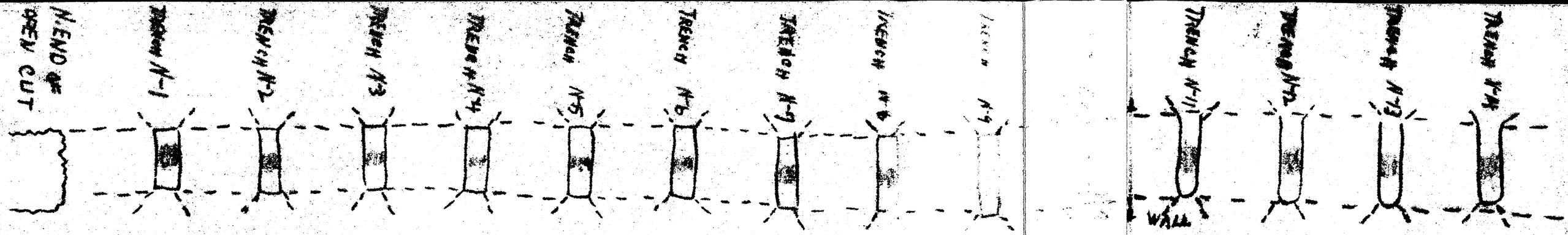
Stage 1 October 1958

	Units	Unit Cost	Unit Cost Prior Reported	Unit Cost Oct. 1, 1958	Unit Cost to Dec. 1, 1958	Estimated Cost	Unexpended Balance
Bulldozer trenches	[illegible]	[illegible]	none	[illegible]	[illegible]	[illegible]	[illegible]
Test Pits	none	[illegible]	none	none	none	[illegible]	100.00
Laboratory supplies			none	[illegible]	[illegible]	[illegible]	[illegible]
Engineer Supervisor			none	300.00	300.00	[illegible]	900.00
Assayer			none	100.00	100.00	[illegible]	[illegible]
Consultant Engineer			none	100.00	100.00	[illegible]	200.00

Liability Insurance 0.0203% per $100. x 4 $3.68

Payroll tax 6.1 % of $400. $18.00

[illegible] allowed



FIRST SAMPLING

TRENCH No.	DEPTH OF TRENCH	[illegible]	Mn %	Fe %	SiO_2	SAMPLE No.
N-1	6'	[illegible]	23.05	3.11		N-1-T
N-2	9'	[illegible]	[illegible]	[illegible]		N-2-T
N-3	6'	[illegible]	13.57	1.91		N-3-T
N-4	7'	[illegible]	13.34	2.31		N-4-T
N-5	9'	[illegible]	6.57	2.31		N-5-T
N-6	8'	[illegible]	21.88	[illegible]		N-6-T
N-7	9'	[illegible]	15.50	[illegible]		N-7-T
N-8	8'	[illegible]	14.51	3.53		N-8-T
N-9	10'	[illegible]	—	—		NONE
N-10	9'	[illegible]	14.70	[illegible]		N-10-T
N-11	10'	[illegible]	[illegible]	[illegible]		N-11-T
N-12	11'	[illegible]	[illegible]	[illegible]		N-12-T
N-13	8'	[illegible]	9.50	[illegible]		N-13-T
N-14	6'	[illegible]	14.13	[illegible]		N-14-T

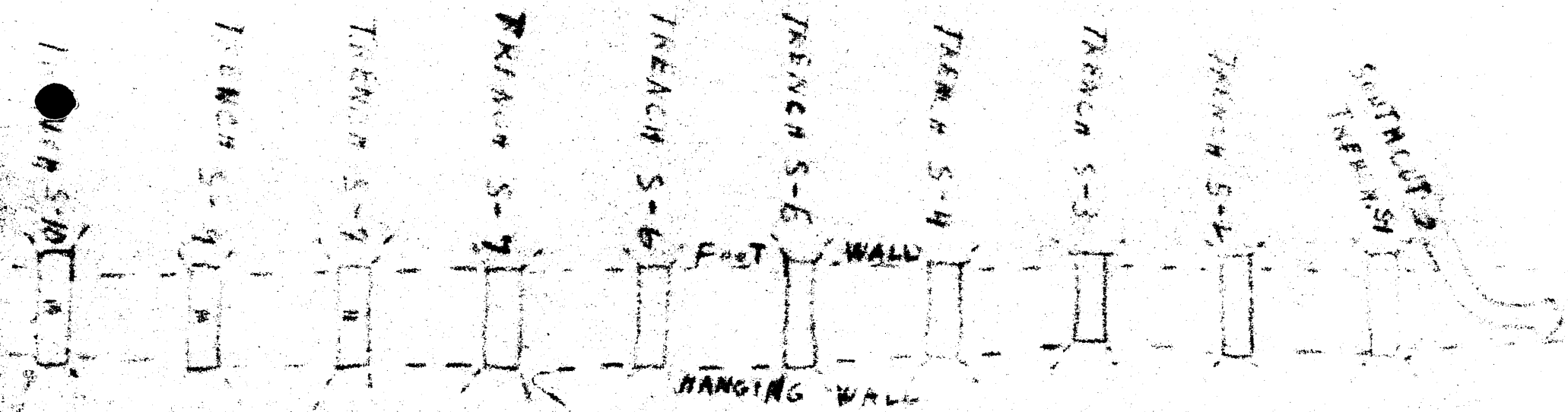
OLD DOMINION MANGANESE CO. INC.

Sept 30 to Oct 30, 1955

DMEA - Contract, Idm-E-874

Bulldozer Trenches

Scale 1" = [illegible]' • Sample



TRENCH NO -	DEPTH OF TRENCH	WIDTH	
S-1	7'	NO SAMPLE	NO ORE
S-2	5'	NO SAMPLE	NO ORE
S-3	16'	NO SAMPLE	NO ORE
S-4	8'	NO SAMPLE	NO ORE
S-5	8'	NO SAMPLE	NO ORE
S-6	7'	NO SAMPLE	NO ORE
S-7	8'	NO SAMPLE	NO ORE
S-8	14'	TRACE	
S-9	6	TRACE	
S-10	9	TRACE	

OLD DOMINION MANGANESE CO. INC.

Sept 30 to Oct 30, 1952

DMEA - Contract, Idm-E-374

Bulldozer Trenches

Scale 1" = 100' = Sample

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 4 1952

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

November 3, 1952

Memorandum

To: Mr. Frank E. Johnson, Chairman, Operating Committee, DMEA

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

Subject: Old Dominion Manganese Co., Inc.
Contract Idm-E374, Docket DMEA-2359 - (Manganese)
Mineral Ridge mine, Shenandoah & Frederick Cos., Va.

Attached is the original with 3 copies of the Field Inspection Report, by H. L. Burmeister, on subject contract.

W. T. Millar

W. T. Millar

Attachments - 4

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 4 1952

DMEA
Field Inspection Report
by
H. L. Burmeister, Engineer
October 30, 1952

Operator:	Old Dominion Manganese Co., Inc. Mineral Ridge mine, Strasburg, Va.
Address:	Room 2100, 52 Wall St., New York, N.Y.
Docket No.:	DMEA-2359
Contract No.:	Idm-E374
Commodity:	Manganese
Total Cost:	$39,600.
Government Participation:	75% - $29,700.
Duration of Contract:	18 months - from July 29, 1952 to January 29, 1953

This property was visited on October 30, 1952. The engineer was accompanyed by Mr. T. Carter, the Superintendent.

During October, 24 bulldozer trenches were completed across the outcrop of the vein. Fourteen of these are located on the northeast extension of the strike. They are located at 100 foot intervals beginning at the northeast face of the old operating pit. The first, numbered N-1, is also 630 feet northeast of a steel marker stake at the old ore pass in the operating pit above No. 6 tunnel.

Ten bulldozer trenches are on the southwest extension of the strike. The first trench is numbered S-1 and is located 100 feet southwest of the "South Cut" shown on the plan.

All trenches on the northeast extension exposed mineral with the exception of N-9. Only 4 of the trenches on the southwest extension exposed mineralization.

The trenches vary greatly in both length and depth due to the terrain and the hardness of the overburden material. A tractor equipped with a scarifier was necessary in most cases to make a bulldozer blade effective. Average depth of trenches at sample level is about eight feet.

Trenching was discontinued on the northeast due to the large boulders of hangingwall sandstone and the steepness of the hill which make trenching impractical. Trenching was discontinued on the southwest for the reason that the last six trenches encountered no mineralization. The bulldozing work has been very well handled by the superintendent.

The results of trench sampling will appear in the Operator's Report for October. Sampling in pits should be more accurate and satisfactory than those taken in bulldozer trenches. Several of the bulldozer trenches expose the mineralized zone across the top of a local fold, therefore the thickness of the zone is indeterminate until pits are sunk.

Each of the 14 trenches to the northeast will have test pits sunk in the mineralized zone. One test pit is to be sunk in Trench S-3 to the southwest. If this pit is encouraging, more may be sunk at the direction of the Field Team. It is believed the chances of uncovering ore to the southwest are not good.

H. L. Burmeister
Mining Engineer

College Park, Md.
November 3, 1952

FILE COPY 400
SURNAME:

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

Rutledge
Selfridge.

OCT 1 5 1952

Mr. McHenry Mosier
Executive Officer, Region VIII
Bureau of Mines
Eastern Experiment Station
College Park, Maryland

Re: Docket No. DMEA 2359 - Manganese
Old Dominion Manganese Company, Inc.
Mineral Ridge Mine
Shenandoah & Frederick Counties,
Virginia
Exploration Contract Idm-E374

Dear Mr. Mosier:

We are enclosing an extra copy of the referenced contract for use of your field representatives in making their examinations and reports.

Sincerely yours,

(signed) FRANK E. JOHNSON

Chairman, Operating Committee

FARutledge'lm
10/14/52

Enclosure

Approved:

J. H. Hedges

Member, Bureau of Mines

A.R. Kinkel, Jr.

Member, Geological Survey

cc: Admn. Reading File
Docket
N. B. Melcher, USBM
M. D. Crittenden, USGS
Field Team Reg. VIII
Operating Committee
G. C. Selfridge
F. A. Rutledge

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 14 1952

October 13, 1952

Memorandum

To: Frank E. Johnson, Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region VIII

Subject: Docket DMEA-2359, Contract Idm-E374
Old Dominion Manganese Co., Inc.
Shenandoah & Frederick Counties, Virginia
(Manganese)

only original received

Attached is the original with three copies of the Field Inspection Report for October, by H. L. Burmeister, on subject contract.

McHenry Mosier

McHenry Mosier

Attachments - 4

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 14 1952

DMEA
Field Inspection Report
by
H. L. Burmeister, Engineer
October 9, 1952

Operator:	Old Dominion Manganese Co., Inc.
Address:	Room 2100, 52 Wall St., New York, N. Y. Mineral Ridge mine, Strasburg, Va.
Docket No.:	DMEA-2359
Contract No.:	Idm-E374
Commodity:	Manganese
Total Cost:	$39,600.
Government Participation:	75% - $29,700.
Duration of Contract:	18 months, from July 29, 1952 to January 29, 1953.

This property was visited on October 9, 1952. The areas under exploration were visited in company with Mr. T. Carter, Superintendent. Mr. Paul J. Bertelsen was contacted in Strasburg, Virginia.

At the time of visit 8 bulldozer trenches had been completed, another had not uncovered the ore zone and yet another had not completely uncovered the ore zone. The two latter will be lengthened and so completed.

The terrain is rugged and heavily wooded. Mr. Carter has done good work in locating the trench sites in spite of this and the meandering of contours. Rain was heavy during the visit, causing clay and silt to wash into the cuts. When the overburden has been stripped and rock is encountered, it is necessary for the bulldozer to work largely in one direction, owing to to 30° dip of the mineralized sandstone. Bedause of this condition the hard layers break and the clay falls into the opening making it difficult to clean up for sampling. Samples were cut in the first five trenches for the information of the management. These represent an average normal width of about 8 feet. The results given below would appear high from visual inspection of the sampled areas. These results are not for record in this contract as the trenches will be more properly cleaned and new samples cut and assayed. The sample numbers refer to the 1st to 5th trenches spaced at 100 feet intervals northeast of the northeast face of the large old surface workings.

N 1	-	18.6 percent Mn.
N 2	-	18.4 percent Mn.
N 3	-	23.5 percent Mn.
N 4	-	16.8 percent Mn.
N 5	-	9.4 percent Mn.

A grab sample of the approximately 20 tons of concentrate at the mill was taken and is being assayed but not by the company. It is not known what these concentrates assay in either manganese or phosphorus although it is suspected that the phosphorus may be high.

A steel pin has been set on the footwall edge of the main open workings above the extension of No. 6 tunnel. This has been done to furnish a reference point. The northeast face of the main open workings is 530 feet northeast of this pin. The southwest face is 300 feet southwest of the pin.

The assayer was assisted in setting up a system for recording assays so they could be found. To the present time there has been no system.

A map and form combined was given to the Superintendent as a guide in reporting surface work progress on monthly reports.

Work on this project began September 29th. The first progress report will include September and October.

H. L. Burmeister
Mining Engineer

College Park, Md.
October 13, 1952

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
College Park, Maryland

OCT 10 1952

October 9, 1952

Memorandum

To: Frank E. Johnson, Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region VIII

Subject: Exploration Project Contract Idm-E374, Docket DMEA-2359
Old Dominion Manganese Co., Mineral Ridge Mine,
Shenandoah & Frederick Cos., Va. (Manganese)

In reference to your letter of September 18, regarding insertion of the starting date under Article 3 of subject contract, enclosed is the original and two copies of this contract with Article 3 properly filled in. The starting date is October 2, 1952, which is within 90 days from the date of the contract, as accepted by the operator.

McHenry Mosier

Enclosures- 3

C
O
P
Y

OLD DOMINION MANGANESE CO.
Incorporated
Star Tannery, Virginia

Please reply to:
Room 2100, 52 Wall St.
New York 5, N. Y.
Tel: Digby 4-3644

October 6, 1952

Mr. McHenry Mosier, Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration Administration, Region VIII
College Park, Maryland

Dear Mr. Mosier:

I have your letters of September 19th and October 3d with reference to DMEA Contract Idm-E374.

We have experienced unforseen delays in obtaining a dozer and did not want to advise the starting date until the dozer was on the site.

Our Superintendent advised last Friday evening that it had started the previous day and that he had so written Mr. Burmeister at College Park.

Therefore, the starting date would be October 2, 1952 which is within the 90 days suggested in your September 19th letter, and we have inserted "90" (days) in the first line of Article 3 of the contract.

Present indications are that the first ten trenches should be completed by tomorrow night, October 7, 1952. Your Field Team will probably want to be there on the following day, in accordance with paragraph (2) of Stage I in Exhibit A to the contract.

With appreciation for your copperation.

Sincerely yours,

OLD DOMINION MANGANESE CO., INC.

/s/ John B. Lewis

President

JBL:s

400

FILE COPY
SURNAME:

Martin
Selfridge

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

SEP 18 1952

Mr. McHenry Mosier, Executive Officer
DMEA Field Team, Region VIII
Bureau of Mines
Eastern Experiment Station
College Park, Maryland

Re: Docket No. DMEA 2359
Old Dominion Manganese Co., Inc.
Mineral Ridge Mine
Shenandoah & Frederick Counties,
Virginia
Contract Idm-E-374

Dear Mr. Mosier:

This acknowledges receipt of your letter of September 10, 1952, enclosing three copies of the subject contract, which are returned herewith. It will be appreciated if in accordance with the last sentence of our letter of July 29, 1952, you will arrange to have the starting date filled in under Article 3.

Sincerely yours,

9-18-52

(signed) FRANK E. JOHNSON

Chairman, Operating Committee

Approved:

J. H. Hedges

Member, Bureau of Mines

T. P. Thayer

Member, Geological Survey

WSMartin:ls
9/15/52

Copy to: Docket
Admn. Read. File
Field team, Reg. 8
W. S. Martin
G. C. Selfridge
Operating Committee

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 23 1952

DMEA
Field Inspection Report
by
H. L. Burmeister, Engineer
September 18, 1952

Operator:	Old Dominion Manganese Co., Inc.
	Shenandoah & Frederick Counties, Virginia
Business Address:	52 Wall Street, New York 5, N. Y.
Docket No.:	DMEA-2359
Contract No.:	Idm-E374
Commodity:	Manganese
Total Cost:	$39,600.00
Government Participation:	75% - $29,700.00
Duration of Contract:	18 months - July 29, 1952 to Jan. 29, 1953

This property was visited September 18, 1952. Mr. Bertelsen, Vice President, was not present but Mr. T. Carter, the General Superintendent, was contacted.

At the time of visit no equipment was operating. The General Superintendent and the mill foreman were the only men on the property. Mr. Carter stated that all operations were suspended August 6, because no assay of concentrates ran over 36 percent manganese. This concentrate being below commercial grade, operations were suspended pending the result of a company conference regarding the advisability of continuing mining operations.

The assays referred to were run by the same man who instructed Mrs. Carter in the method of assaying. After closing down, Mr. Bertelsen took the rejects of many of the samples to Andrew S. McCreath & Son in Harrisburg, Pa. for a check. This firm returned assays roughly 20 percent higher than the man who had set up the laboratory for the company and had run the assays referred to. It appears to the writer that the error may well be traced to standardization of solutions as in the original assays and in the checks, different substances were used for standardization at the two laboratories.

After three weeks of conference, Mr. Carter states that now operations will be resumed in a matter of a few days or a week.

Arrangements have been made for a bulldozer to start work on the trenches, mentioned in Exhibit "A" in the contract.

In rehabilitating the old main pit, the north and south faces were cleaned. The north face shows about 15 feet of overburden and about 12 feet of ore. The ore is very spotty making a cut-sample of little value. An estimate of 8 percent manganese is made by the writer. The south face of the pit although having been cleaned up has now caved to the point that only a part of the east wall and a very small part of the face can be seen. This face appears to be no better than the north face. The overburden is about the same thickness. Mr. Carter states that the assays of a sample mill-run of about 20 tons from the south face were - heads 14 percent manganese, heavy media concentrates 44 percent manganese and tails 3 percent manganese.

No plans have been made for cleaning out No. 6 tunnel and apparently will not be made until production has been firmly established from surface workings. This could result in not being able to complete the drifting in the time limit, if the drifting stage is reached.

Mr. Carter was supplied with copies of Monthly Operators Report forms and a sample of each was marked as a sample to fit the requirements of the contract. A sample outline of Narrative Report and the report detailing salary costs were made. A ledger form was also left in order that the Superintendent could easily keep track of the maximum allowable costs.

H. L. Burmeister
Mining Engineer

College Park, Md.
September 19, 1952

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~
College Park, Md. September 10, 1952

Memorandum

To: Frank E. Johnson

From: Executive Officer, DMEA Field Team, Region VIII

Subject: Exploration Project Contract Idm-E374, Docket DMEA-2359
Old Dominion Manganese Co., Inc., New York, N. Y. (Manganese)

Attached are three copies of the subject contract including the original which have been signed by John B. Lewis, President, Old Dominion Manganese Company, Inc.

McHenry Mosier

Attachments (3)

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 11 1952

wmc

Docket 400
FILE COPY
SURNAME:

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

Rutledge
Selfridge
Wattendorf

AUG 13 1952

Mr. McHenry Mosier
Executive Officer, Region VIII
Bureau of Mines
Eastern Experiment Station
College Park, Maryland

Re: Docket No. DMEA 2359 - Manganese
Old Dominion Manganese Company, Inc.
Mineral Ridge Mine
Shenandoah and Frederick Counties,
Virginia

Dear Mr. Mosier:

We are enclosing the original and five copies of the above referenced exploration contract signed by this office for the Government, together with Annex I (2 pages), Exhibit "A" (4 pages), subordination agreement and one map.

If the terms and conditions of this contract are satisfactory to you and the Operator, all six copies should be signed by a duly authorized official of the Company. The "Operator's Copy" is to be given to the Operator; the "Field Team's Copy" retained by your office; the "Finance Officer's Copy" is to be sent to the Regional Finance Officer; and the remaining three copies returned to this office.

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

The following revisions have been made as you recommended in your memorandum of July 31, 1952.

1. The term "bulldozer trench" has been used in all cases where describing the work of trenching under Stage I.

2. The paragraph on differentiation between agreed unit costs and estimated actual costs in the section on Estimated Costs of the Project was placed between the two costs in order that there could be no confusion. In addition, the "estimated" modifying agreed unit costs was eliminated.

3. The "Drive a maximum of 1,000 feet of drift from the present ends of the drifts on the No. 6 Tunnel level" was changed to: "Extend the No. 6 Tunnel level at either one or both ends an aggregate distance not to exceed 1,000 feet".

4. The probable location of the exploration work under Stage II and as much of that under Stage I as covered by the map attached to the contract has been shown.

5. The probable location of the "main open pit" referred to in the contract also has been added to the map. This is only approximate since its location was not furnished by the field team but had to be taken from an old Geological Survey report (1941).

The other revisions recommended that were not made are as follows:

1. Limitation of size and length and depth of bulldozer trenches. There were no recommendations or data on these items in the field team report and since the agreed unit cost was on the basis of completed bulldozer trenches across the outcrop, this item was accepted.

2. The field team report also recommended unit payment for the test pits with a minimum size of 2.5' x 7' in plan by 10 feet deep which has been used.

The Operator in his revised application indicated his willingness to have these items set up for payment on an agreed unit cost basis.

Sincerely yours,

(signed) FRANK E. JOHNSON

Chairman, Operating Committee

FARutledge'lm
8/7/52

Enclosures

Approved:

C. H. Johnson
Member, Bureau of Mines

S. M. Lemmon
Member, Geological Survey

cc: Admn. Reading File
Docket
N. B. Melcher, USBM
M. D. Crittenden, USGS
Field Team Reg. VIII
Operating Committee
G. C. Selfridge
F. A. Rutledge

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
1 1952

July 31, 1952

Memorandum

To: Frank E. Johnson, Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region VIII

Subject: Contract Idm-E374, re your letter of July 29, 1952
Docket No. DMEA-2359 - Manganese
Mineral Ridge Mine, Old Dominion Manganese Co., Inc.
Shenandoah and Frederick Counties, Virginia

The description of the work to be done under this contract in general is satisfactory with this office with the exception of the terminology.

In view of recent experience, it is considered advisable to be more definite in Exhibit "A" and to use standard, uniform nomenclature throughout the exhibit to describe the work to be done under the contract. In Stage I the proposed exploratory work is trenching. In Exhibit "A", it is referred to as "open cuts" in section 1, paragraph 1; as "trenches" and as "cuts" in section 1, paragraph 2; as dozer cuts in section 2; as "bulldozer trenches" in line 1, page 2, and twice as "bulldozer cuts" in estimated costs, page 2.
(Field Team terminology used in original Exhibit A.)

The trenches are specified as 30 in number but with no limits on width or length. Since a bulldozer is to be used, the width of the bulldozer blade is the controlling factor, but the maximum linear footage should be specified.

In Stage I, section 1, paragraph 3, the requirements for each cut are not stated clearly nor definitely. They should be rewritten so as to have only one possible interpretation. Also, the test pits are specified as a minimum of 2.5' x 7' x 10' deep. The maximum accumulated depths should be as stated or the total funds allotted for both trenching and testpitting should be specified separately.

In the agreed unit costs, Exhibit "A", page 2, it would simplify the administration of the contract to have payment made for trenches on either a unit of vertical area or cubic yards, and for test pits on their actual depth below the bottom of the trench. This would avoid interminable squabbles over appropriate lengths of trenches and depths of test-pits. Incidentally the "agreed unit costs" are also "scheduled below" so the explanation in the first paragraph under "estimated costs of the project" might be confusing.

In Stage II, section 1, it is stated "Drive a maximum of 1,000 feet of drift from the present ends of the drifts on the No. 6 tunnel level." Does this mean 1,000 feet maximum from each end or a combined total of 1,000 feet of drifting from the two ends? As now written this is not clarified for the reader until he reaches page 2, "agreed unit costs."

The map does not show the proposed exploratory work. Reference is made to the present "Main Open Pit." There are the "South cut," "Center cut," and "Nelson cut" and two of these are labeled "Outcrop." Which one is to be considered the "Main open pit"?

In order to avoid divergent interpretations of the contract by the operator, by the Field Team, and by the Washington Office, it is suggested that Exhibit "A" be revised to reduce its present ambiguity.

McHenry Mosier

McHenry Mosier

Enclosures:
6 copies of Contract including
Annex 1, Exhibit "A" and Map

OLD DOMINION MANGANESE COMPANY, INC.
EXPLORATION PROJECT CONTRACT
DOCKET NO. IBEA-2359

EXHIBIT "A"

Description of the Work

Stage I

Time Schedule: 0-3 months.

1. Bulldoze a maximum of 30 open cuts across the outcrop of the residual ore zone at 100-foot intervals on the strike. The first cut to be 100 feet northeast of the present main open pit on the outcrop. Additional cuts to be spaced at 100-foot intervals to the northeast along the strike of the ore zone until either the limits of the ore zone are reached or the maximum of 30 open cuts are excavated, whichever is the lesser, as determined by the Operator, subject to approval by the Field Team.

If the limit of the northeastern extension of the ore zone is reached before the contracted 30 trenches have been excavated, the remaining trenches shall be bulldozed across the southwestern extension of the ore zone starting at a point 100 feet southwest of the "South Cut" shown on "Map of Mine of Ky-Grade Manganese Co.Inc., No. 7", attached hereto and made a part hereof. Cuts shall be spaced at 100-foot intervals.

Each cut to be excavated until the ore showings are well exposed or until the attainment of additional depth within the limit of the contracted price is infeasible.

2. Sink a maximum of 30 test pits in the above trenches. Sinking of the test pits and their location is subject to approval of the Field Team. On the completion of 10 dozer cuts, a member of the Field Team will examine the cuts and check to see that their sampling has been done in a manner satisfactory to the Government. If in the Field Team's judgment valuable information can be obtained by the sinking of a test pit below the floor of the dozer cut, the Field Team and the Operator will together locate one pit in each trench so selected. Each test pit shall be a minimum of 2.5 x 7 feet in plan by 10 feet in depth with the 7-foot length across the strike of the ore body.

Stage II

Time Schedule: 4-12 months.

1. Drive a maximum of 1000 feet of drift from the present ends of the drifts on the No. 6 Tunnel level. The work of Stage II is to be

undertaken only after the completion of the bulldozer trenches and/or test pits on the northeastern extension of the ore zone under Stage I, and with the prior approval of the Field Team.

OK The cleaning out of the portal of the No. 6 crosscut and the necessary rehabilitation of the No. 6 crosscut and drifts on the No. 6 level will be at the Operator's expense and not allowable under this contract since they lie within the block of ground exempt from the subject contract, as indicated in Annex I.

Estimated Costs of the Project
(*Indicates allowable maximum)

The Government will contribute to the cost of bulldozer cuts, test pits, and drifting on the basis of the agreed, estimated, unit costs per cut, test pit, or foot in lieu of actual costs as they accrue for units of work actually performed. These unit costs include all costs of the work, including engineering, geology, and sampling, except those scheduled below to which the Government will contribute on the basis of actual costs.

AGREED UNIT COSTS

Stage I		
30 bulldozer cuts @ $175.00* per cut	$5,250.00	
30 test pits @ $50.00* per test pit	1,500.00	$6,750.00*
Stage II		
1000 feet of drifting @ $25.00* per foot		$25,000.00*

SCHEDULED ACTUAL COSTS

(1) Independent Contracts

Stages I and II

None

FILE COPY
SURNAME:

Selfridge

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

July 29, 1952

Mr. Paul J. Bertelsen
Room 2100
52 Wall Street
New York City, New York

Re: Docket No. 2359 - Manganese
Mineral Ridge Mine
Shenandoah and Frederick Counties,
Virginia

Dear Mr. Bertelsen:

In response to your telephone inquiry of today, this is to advise that the contract pertaining to the subject docket will be released for mailing to Mr. Mosier this afternoon. Therefore, you should hear from him within a very few days.

Sincerely yours,

G. C. Selfridge, Chief
Iron and Ferro-Alloy Division

GCSelfridge:ls 7/29/52

cc: Docket
Admn. Reading File
G. C. Selfridge

Docket 400
FILE COPY
SURNAME:

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

Rutledge
Selfridge

JUL 29 1952

Mr. McHenry Mosier
Executive Officer, Region VIII
Bureau of Mines
Eastern Experiment Station
College Park, Maryland

Re: Docket No. DMEA 2359 - Manganese
Old Dominion Manganese Company, Inc.
Mineral Ridge Mine
Shenandoah and Frederick Counties,
Virginia

Dear Mr. Mosier:

We are enclosing the original and five copies of the above referenced exploration contract signed by this office for the Government, together with Annex I (2 pages), Exhibit "A" (4 pages), subordination agreement, and one map.

If the terms and conditions of this contract are satisfactory to you and the Operator, all six copies should be signed by a duly authorized official of the Company. The "Operator's Copy" is to be given to the Operator; the "Field Team's Copy" retained by your office; and the remaining four copies returned to this office.

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

Please note that the following major changes have been made in the contract as originally outlined by the field team:

1. The unit cost for the bulldozer cuts has been increased from $160.00 to $175.00.

2. A sum of $100.00 under operating materials and supplies for sampling equipment and assay supplies was added for each stage.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON

July 29, 1952

Memorandum

To: Executive Officer, Region VIII

From: DMEA Operating Committee

Subject: DMEA-2359, Old Dominion Manganese Company, Inc., contract.

Upon execution of the attached contract, the Field Team will make distribution in accordance with instructions contained in Memorandum No. 10, dated July 24, 1952.

3. A sum of $250.00 under Stage I and $400.00 under Stage II was added for contingencies.

The above changes have increased the amount of the contract from $38,300.00 to $39,600.00.

Under Article 3, the starting date has been left blank and is to be filled in when the contract is signed by the applicant.

Sincerely yours,

(signed) FRANK E. JOHNSON

(JHB)

Chairman, Operating Committee
Defense Minerals Exploration
Administration

FARutledge'lm
7/25/52

Enclosures

Approved:

J. H. Hedges (JHB)

Member, Bureau of Mines

T. P. Thayer (JHB)

Member, Geological Survey

cc: Admn. Reading File
Docket
N. B. Melcher, USBM
M. D. Crittenden, USGS
Field Team Reg. VIII
Operating Committee
G. C. Selfridge
F. A. Rutledge

7/29

Rm 4539 ~~4359~~

140

FILE COPY
SURNAME:

aEKane

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

July 24, 1952

Memorandum

To: Acting Administrator

Through: G. C. Selfridge

From: Acting Chief Counsel

Subject: Old Dominion Manganese Co., Inc., Docket No. DMEA 2359

There is attached, in satisfactory legal form for execution, a contract covering the subject project.

Although it may not be essential, you might consider the advisability of attaching a new map to the contract, since the map now attached does not show where the property detailed in Annex I is located, and indicates only (1) where the present mine workings are, and (2) that the work is to be performed on either side of the lines marked "X-X" and "Y-Y" respectively, and at some places probably located off the map.

A. E. Kane
Acting Chief Counsel

Attachment
AEKane/mef
cc to: Mails and Files
A. E. Kane
J. L. Hofflund
G. C. Selfridge
Chron.

OLD DOMINION MANGANESE COMPANY
INCORPORATED
STAR TANNERY, VIRGINIA

PLEASE REPLY TO:
ROOM 2100, 52 WALL STREET
NEW YORK 5, N. Y.
TEL: DIGBY 4-3644

July 22, 1952

Mr. G. C. Selfridge, Chief
Iron and Ferro-Alloy Division
United States Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA 2359 - Manganese
Old Dominion Manganese Co., Inc.
Mineral Ridge Mine
Frederick and Shenandoah Counties,
Virginia

Dear Mr. Selfridge:

Since the date of our application we have changed our status from lessee-contractor, as stated in the application, to that of owner. Will you kindly, therefore, make this change in our status.

Sincerely yours,

OLD DOMINION MANGANESE COMPANY, INC.

Paul J. Bertelsen

Paul J. Bertelsen

Vice President

PJB:s

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
[illegible]
JUL 24 1952

FILE COPY 400
SURNAME:

Rutledge
Selfridge

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

JUL 15 1952

Mr. Paul J. Bertelsen
Old Dominion Manganese Co., Inc.
c/o F. Eberstadt and Co.
39 Broadway
New York, New York

Re: Docket No. DMEA 2359 - Manganese
Old Dominion Manganese Co., Inc.
Mineral Ridge Mine
Frederick and Shenandoah Counties,
Virginia

Dear Mr. Bertelsen:

In processing your application for an exploration contract, it was noted that there has been no written communication received regarding a change in the status of ownership of the land covered by the application.

To bring the docket up to date, we suggest that you submit a request for a change in your status as applicant from lessee-contractor, as stated in the application, to that of owner, which we understand is the present status.

Sincerely yours,

J.W. 7-15-51

Signed

G. C. Selfridge, Chief
Iron and Ferro-Alloy Division

FARutledge:lm
7/14/52

cc: Admn. Reading File
Docket
N. B. Melcher, USBM
M. D. Crittenden, USGS
Field Team Reg. VIII
G. C. Selfridge
F. A. Rutledge

FILE COPY
SURNAME:

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

Rutledge
Selfridge

Mr. John L. Hoffland, Chief Counsel, DMEA July 10, 1952
Iron and Ferro-Alloy Division, DMEA

Review and preparation of exploration project contract
Docket No. DMEA 2359 - Manganese
Old Dominion Manganese Co., Inc.
Mineral Ridge Mine
Frederick and Shenandoah Counties, Virginia

Transmitted herewith is the subject docket, together with a rough draft of a proposed exploration contract for your use in preparing the contract in final form.

A subordination agreement from Clyde W. Beckner, Inc., which corporation holds a lien against the property in the amount of $15,000.00, is attached.

G. C. Selfridge, Chief
Iron and Ferro-Alloy Division

Attachments

FARutledge:ls 7/10/52

CC: Docket
Admn. Read. File
G. C. Selfridge

OLD DOMINION MANGANESE COMPANY
INCORPORATED
STAR TANNERY, VIRGINIA

PLEASE REPLY TO:
ROOM 2100, 52 WALL STREET
NEW YORK 5, N. Y.
TEL: DIGBY 4-3644

July 7, 1952

Mr. G. C. Selfridge, Chief
Iron & Ferro-Alloy Division
Defense Minerals Exploration Administration
Washington 25, D. C.

Docket No. DNEA - 2359 Manganese

Dear Mr. Selfridge:

We are enclosing six (6) copies of Subordination Agreement, properly executed, including the information as to the recording of the deed of trust in both counties involved.

We understand that Mr. Burmeister of the Bureau of Mines is recommending against granting that part of our application involving reopening the #6 and #8 tunnels and cleaning our the #6 level preparatory to level driving. As the purpose of your program is to discover deposits of strategic minerals, we do not feel that too fine a line should be drawn between exploration and development as to defeat the purpose of the program as far as manganese is concerned.

As it is necessary to do this work to get to the faces, we feel that this work is justified and should be included.

We have just started our operation on the open-cut ore and are making a very satisfactory separation.

Yours very truly,

OLD DOMINION MANGANESE COMPANY, INC.

John B. Harris
President

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 8 1952

JBL:s
Encs. (6)

MINNESOTA LABORATORIES
EMBARRASS MINE
CORSICA MINE
[illegible]NIA
[illegible]ANY MINE
[illegible]ING (Special)
[illegible]ANTON MINE
[illegible]ONING MINE
[illegible]ETT MINE

ESTABLISHED 1892

LERCH BROTHERS INCORPORATED

THE IRON ORE CHEMISTS

CONSULTING SERVICE—MINNESOTA AND ONTARIO

GENERAL OFFICES

HIBBING, MINNESOTA

MINNESOTA LABORATORIES
HAWKINS MINE
HILL-ANNEX MINE
DANUBE MINE
CROSBY
SPRING VALLEY MINE

CANADIAN LABORATORY
STEEP ROCK LAKE, ONT.

ANALYSES OF IRON ORE FOR

*LAB. NO.	MINE NO.	REMARKS	IRON	PHOS.	MANG.	SILICA	ALUM.	MOIST.
1561	OD-1		23.65	.354	4.15	4.74		
162	OD-2		14.90	.378	3.87	6.56		
163	OD-3		4.86	.162	.84	80.72		

*SECOND MILLION SERIES

LABORATORY MAHONING

DATE

SAMPLED BY

ANALYZED BY

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

July 7, 1952

Memorandum

To: Frank E. Johnson, Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region VIII

Subject: Docket No. DMEA-2359 - (Manganese)
Mineral Ridge Mine, Old Dominion Manganese Co.,
Frederick and Shenandoah Counties, Virginia.

Attached is certificate of assay from Lerch Bros. for the three samples taken by Mr. H. L. Burmeister. These samples were mentioned in the last sentence of my memorandum to you under date of June 25.

Please note that the highest manganese content in any of these samples is 4.15 percent.

McHenry Mosier

Attachment

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 8 1952

IN REPLY REFER TO:

G-MD-LP

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

Memorandum July 2, 1952

To: George C. Selfridge, DMEA

From: Louis Pavlides

Subject: Field Team Report DMEA 2359

Maps of the Mineral Ridge Mine are not furnished with this report and my only other information on this docket are the memos in Max Crittenden's file. My knowledge on the subject docket is therefore secondhand.

The information I have on hand indicates that a large discrepancy in grade exists between the sampling reported by Grasty (20-35%Mn) and that which has been reported by the Bureau of Mines (4%Mn, aver.) for the property. It would probably be best to await the results of the sampling made by the examining engineer before further considering the merits of the ten proposals of the subject report. On the assumption that the results of the sampling prove encouraging my comments on these proposals are indicated below.

Proposal (1)

Sentence 1. "*** the first cut to be 100 feet from either end of the present main open pit on the outcrop."

This is not clear to me. It suggests two pits cut simultaneously on either end of the open pit where as in proposal (5) "After completion of bulldozer trenches and/or test pits on <u>one end</u> of the present open cut ***".

Sentence 2. "Each cut to have a minimum depth of 10 feet unless ore showings satisfactory to the Field Team are encountered before a depth of 10 feet is reached."

It would be difficult to guesstimate good ore in this type of a deposit. Sampling would be necessary. Why not stick to a depth of 10 feet for all trenches, the only exception being where physical conditions made it very difficult or impossible to reach such a depth. Also, the proposal as it stands would necessitate the presence of a field team representative constantly on the job while the first 10 cuts were being made in order to judge when good ore was reached and further deepening of the trench was not necessary.

DEPARTMENT OF THE INTERIOR
Division of Mineral Resources
JUL 3 - 1952

Sa

Proposal (2)

Sentence 2. "*** samples will be cut under the supervision of a Field Team Representative."

This is a praiseworthy idea but it would probably take up too much of the Field Team Representatives time. Why not have the Field Team Representative stake out the sample intervals in the trenches and let the sampling be done under the supervision of the company engineer?

Proposal (4)

It is not clear what this refers to. It appears to be a restatement of (3).

Lou Pavlides

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~

College Park, Maryland

Reviewed by
DMEA OPERATING COMMITTEE
6-30-52
(date)

June 25, 1952

DEPARTMENT OF THE INTERIOR
Office of Defense Mineral Exploration
JUN 26 1952

Memorandum

To: Frank E. Johnson, Chairman, Operating Committee, DMEA
(W. T. Millar, Acting for
From: (Executive Officer, DMEA Field Team, Region VIII

Subject: Docket No. DMEA-2359 - (Manganese)
Report of Mining Engineer, Region VIII, on examination of Mineral Ridge Mine, Old Dominion Manganese Co., Frederick and Shenandoah Counties, Virginia, June 19 and 20, 1952.

This report has been made on the basis of the applicant's requested revision of the proposal for exploration as stated in your letter of June 16, 1952.

It is recommended that the following action be taken:

(1) Bulldoze a maximum of 30 open cuts across the outcrop at 100 foot intervals on the strike, the first cut to be 100 feet from either end of the present main open pit on the outcrop. Each cut to have a minimum depth of 10 feet unless ore showings satisfactory to the Field Team are encountered before a depth of 10 feet is reached. A bulldozer of a size not smaller than a D-6 or equivalent shall be used. The all inclusive and maximum allowable cost per trench to be $160.00.

(2) On the completion of 10 dozer cuts a member of the Field Team will examine the cuts. Before any test pits are sunk, channel samples will be cut under the supervision of a Field Team Representative. If in the Field Team's judgment valuable information can be gained by sinking a test pit below the floor of the dozer cut, one pit approximately $2\frac{1}{2}$ x 7 feet in plan by 10-feet deep may be sunk in each dozer trench; the 7-foot length being across the strike. The decision to dig or not to dig a pit in each trench and its location lies solely with the Field Team. The all inclusive and maximum allowable cost per test pit to be $50.00

(3) Number six cross-cut or portal will not be cleaned out or rehabilitated under this contract. The ground above this level lies under the present open cut and this block has been reserved by the applicant so that any ore extracted therefrom will not be subject to royalty to the Government. It is therefore not subject to the terms of the proposed contract.

F.T. EXAM.

(4) It is taken that this request means No. 6 adit. Rehabilitation of the 850 feet or any portion of No. 6 adit can not be done, because it is in the block definitely excluded by the applicant from the proposed contract.

(5) After completion of bulldozer trenches and/or test pits on one end of the present open cut, the Field Team will make an examination of that end and make recommendations regarding the advisability of starting the next phase of the program, which is extending No. 6 level; the Field Teams judgment to be final. This procedure to be duplicated on the opposite end of the open cut. If drifts are recommended, the all inclusive and maximum allowable cost per foot of drift will be $25.00. The $25.00 cost per foot is recommended rather than the $12.00 requested by the applicant, as being more realistic for total direct costs, except supervision. The maximum footage of drifting on No. 6 level not to exceed a total of 1,000 feet. The amount of footage either north or south shall be governed by the recommendations of the Field Team from time to time.

(6) Neither the portal of No. 8 cross-cut nor the cross-cut itself shall be cleaned up or rehabilitated under this contract. The reasons for this are the same as expressed under paragraph (3) relating to No. 6 cross-cut and portal. In addition, No. 8 is probably below the ore zone and could be used only for development work on the ore remaining under No. 6 level if that has not been largely removed by previous operators.

(7) No drifts to be driven on No. 8 level because much of the requested drifts would be in the block exempted from royalty payments to the Government. In addition it is probable that No. 8 level is below the depth of economic mineralization.

(8) It is recommended that a superintendent be employed for a period of 12 months unless the contract is terminated before that time. The revised application requested 10 months but Mr. Bertelsen now requests an increase to 12 months. The salary of the superintendent to be $400.00 per month.

(9) It is recommended that a part time assayer and engineer be employed at the rate of $100.00 per month, all necessary and usual assays of open cut, test pit or drift face to be made for manganese and iron with the necessary assays for phosphorus and silica needed for control. This man will also keep up to date the surveying and mapping necessary for the Monthly Progress Reports; the terms of length of employment related in paragraph (8) apply likewise in this case.

(10) It is recommended that the maximum total allowable fee of $1,000.00 for consultant be included in the cost of this project.

The allowable maximums are listed below in conformance with the paragraph numbers:

(1)	$ 160.	x 30	- - - - - - - - -	$ 4,800.
(2)	50.	x 30	- - - - - - - - -	1,500.
(5)	25.	x 1000	- - - - - - - - -	25,000.
(8)	400.	x 12	- - - - - - - - -	4,800.
(9)	100.	x 12	- - - - - - - - -	1,200.
(10)	1,000.		- - - - - - - - -	1,000.
				$38,300.

Mr. Bertelsen advised that he would ask a revision of the contract extending it to 12 months.

After reviewing the above terms of contract with Mr. Bertelsen, the examining engineer was able to get underground. The superintendent had found a way to get underground from the open cut some time past and he accompanied the engineer. After traversing caved ground and through gophered holes it was discovered that what the company believed to be No. 6 level was very probably an intermediate level above No. 6. This level extended from a caved cross-cut a distance of 350 feet to the south and 6 feet to the north. The cross-cut continued beyond the drift for an indeterminate distance as it was completely caved approximately 40 feet beyond the drift. This caved area may well have been at the location of an ore pass from the open cut to No. 6 level. It is estimated that this drift is about 30 feet below the floor of the open cut. The drift showed comparatively poor ore, much of which was wad. Three samples were taken, the results of which are not yet available.

W. T. Millar

W. T. Millar for
McHenry Mosier

cc for FEJohnson

Docket

400

FILE COPY
SURNAME:

Selfridge

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

JUN 16 1952

Mr. McHenry Mosier, Executive Officer
DMEA Field Team, Region VIII
Bureau of Mines, Eastern Experiment Station
College Park, Maryland

Re: Docket No. DMEA 2359 - Manganese
Mineral Ridge Mine
Shenandoah and Frederick Counties,
Virginia

Dear Mr. Mosier:

Enclosed are copies of memoranda dated February 14 and April 2, 1952, by Mr. M. D. Crittenden, and a letter dated March 8, 1952, by Mr. Paul J. Bertelsen. Processing of this application has been held in abeyance because the applicant did not have the necessary legal papers in order. The Company is now incorporated, is the owner of the property, and has signed subordination agreements for a mortgage.

Since the applicant requested aid related principally to development and production rather than exploration, an alternative program was discussed along the lines mentioned in Mr. Crittenden's memorandum of February 14. This was agreeable.

Today Mr. Bertelsen stopped in the office to request a further revision of the program as follows:

(1) Excavate 30 trenches at 100-foot intervals along the strike of the manganese mineralization on Mineral Ridge at a cost of approximately $6,000.

(2) Dig two 4 X 4 X 10-foot test pits in each trench at approximately $67 a piece or $4,000 total.

(3) Rehabilitate the portal of the No. 6 adit at a cost of approximately $1,000.

(4) Rehabilitate approximately 840 feet of the No. 6 adit at a cost of $4.00 per foot or a total of $3,400.

(5) Drive 500 feet of drift at each end of the No. 6 level at a cost of approximately $12.00 per foot or a total of $12,000.

(6) Rehabilitate the portal of the No. 8 adit at a cost of approximately $1,000.

(7) Drive 1,000 feet of drift to the northeast and the southwest at a cost of approximately $12.00 per foot or a total of $24,000.

In addition to the above costs, the Company wishes to add $400 a month for a superintendent for 10 months for a total of $4,000; employ a part-time assayer at a total cost of $1,000; and allow for consulting fees a total of $1,000. The over-all total is $57,400.

During the applicant's last visit to the property he was able to climb down through the old workings to the No. 6 level and examine a good part of it. He claims that it is not all mined out and that there is a good deal of ore in sight. The above-noted program appears to be quite ambitious and undoubtedly the proposed costs are out of line.

As discussed with you by telephone, Mr. Bertelson will probably visit the property on Wednesday or Thursday of this coming week and would like, if the Field Team is to make an examination, to have the examination made at that time. We believe that the property should be examined and a program suggested, if warranted, that is in keeping with the potentialities of the deposit. Will you please arrange to make an examination of the property in company with the applicant and work out a reasonable exploration project with him.

Sincerely yours,

6/16

(signed) FRANK E. JOHNSON

(FEJ)

Chairman, Operating Committee
Defense Minerals Exploration
Administration

Enclosures

GCSelfridge:ls 6/13/52

Approved:

C. H. Johnson (FEJ)
Member, Bureau of Mines

S. M. Lemmon (FEJ)
Member, Geological Survey

Copy to: Admn. Reading File
Docket
Field Team, Reg. 8
G. C. Selfridge
Operating Committee
M. D. Crittenden, USGS
N. B. Melcher, USBM

OLD DOMINION MANGANESE COMPANY
INCORPORATED
STAR TANNERY, VIRGINIA

PLEASE REPLY TO:
ROOM 2100, 52 WALL STREET
NEW YORK 5, N. Y.
TEL: DIGBY 4-3644

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 18 1952

June 16, 1952

Mr. G. C. Selfridge, Chief
Iron & Ferro-Alloy Division
Defense Minerals Exploration Administration
Washington 25, D. C.

Docket No. DNEA - 2359 Manganese

Dear Mr. Selfridge:

In accordance with our conference with you last week, we wish to amend our application for an exploration contract by substituting the following program for that outlined in our original application.

1.	Bulldozing trehches along outcrop	30 @ $200.00	$6,000.00
2.	Digging test pits	60 @ 64.00	3,840.00
3.	Reopen #6 Tunnel		1,000.00
4.	Clean out 850 feet of level	@ 4.00	3,400.00
5.	Drive 1,000 feet of level	@ 12.00	12,000.00
6.	Reopen #8 Tunnel		1,000.00
7.	Drive 2,000 feet of level	@ 12.00	24,000.00
8.	Superintendent - 10 months	@ 400.00	4,000.00
9.	Part time assayer		1,000.00
10.	Consultant fees		1,000.00
			$57,240.00

The above work to be done at the above unit estimated costs, thereby eliminating detailed cost accounting.

Our corporation was incorporated in Delaware.

We are enclosing the subordination agreement of Clyde W. Beckner, Inc., which corporation holds a lien against the property in the amount of $15,000.00

We hope that the above information will enable you to proceed with the processing of our application as we are anxious to start the above program.

Yours very truly,

OLD DOMINION MANGANESE COMPANY, INC.

John B. Lewis
President

Enc.

FILE COPY
400 SURNAME:

Selfridge.
Mitt

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

JUN 13 1952

Mr. Paul J. Bertelsen, Vice-Pres.
Old Dominion Manganese Co., Inc.
219 Virginia Street, West
P. O. Box 2388
Charleston, West Virginia

Re: Docket No. DMEA 2359 - Manganese
Mineral Ridge Mine
Shenandoah and Frederick Counties,
Virginia

Dear Mr. Bertelsen:

Approximately two months have passed since you called at our office in Washington on your way to the subject property to secure the necessary legal papers to accompany your application. Since we have had no word from you, will you please advise us whether or not you can and wish to proceed with your application. We would like to continue processing the application to completion but cannot do so until we hear from you.

Sincerely yours,

Signed

D.N.
6-13-52

G. C. Selfridge, Chief
Iron and Ferro-Alloy Division

GCSelfridge:ls 6/13/52
CC: Admn. Reading File
Docket
Field Team, Reg. 8
N. B. Melcher, USBR
M. D. Crittenden, USGS
G. C. Selfridge

Send with applicant

5/1/52

Mr. Selfridge:

Mr. Bertelsen called at the office and left his revised program on 3/27/52. Subsequent to that you placed a note in docket--"Hold for Legal Papers".

For the Monthly Report does that note mean we are holding up docket until applicant furnishes certain legal papers, yes or that some papers were turned over to Legal Divn. to give their opinion on same?

At any rate, perhaps a follow-up to whichever is concerned is warranted since a month has elapsed without action?

ls

Fellow was in 10 days ago and was going to field to get them.

About April 20

IN REPLY REFER TO:

G-MD-MDC

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

April 2, 1952

Memorandum

To: George C. Selfridge, DMEA

From: M. D. Crittenden

Subject: DMEA 2359 - Manganese

The present proposal calls for trenching the outcrop of the ore horizon at 100' intervals. The distance from the north end of the present trench to the road is about 2000 feet, hence there would be about 20 such trenches. Only a small number of such trenches are within the area shown to be mineralized by extensive workings, and nearly half would be on an area on which there is no record of mineralization. Probably this is more work in this area than is warranted, and it might be more logical to begin trenching near the northeast end of the present trench, and continue northeastward at intervals of 100 feet as far as mineralization persists, but not necessarily all the way to the creek, although provision would have to be made for that eventuality.

Proposal No. 2, for test pits to a depth of 10 feet in the bottom of those trenches which show "commercial ore" seems like more extensive work than necessary for exploration purposes, inasmuch as they presumably would in any case sample and assay those parts of the trench which show mineralization.

Proposal No. 3. Reopening the No. 8 adit and raising to the No. 6 level appear to be desirable.

Mark D. Crittenden Jr

Copy retained 400

OLD DOMINION MANGANESE COMPANY, INC.

March 8, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 28 1952

Mr. G. C. Selfridge, Chief
Iron and Ferro-Alloy Division
Defense Minerals Administration
Washington 25, D. C.

Dear Mr. Selfridge: Re: Docket No. DNEA-2359 Manganese

In reply to your letter of February 21st and following our recent conversation with you, we wish to amend our proposal regarding the exploration of our Mineral Ridge property as follows:

In lieu of removing the overburden along the outcrop by bulldozing, we now propose the following -

1. To cross-trench the outcrop at intervals of about 100 feet for the entire length of the outcrop on the property in the manner suggested in your letter.

2. To dig test pits to a depth of about ten feet in the bottom of each trench, when the trenching indicates the presence of commercial ore.

3. To reopen No. 8 adit including such retimbering as may be necessary and the driving of a raise.

It is extremely difficult to estimate the cost of this work, particularly the reopening and retimbering, as it is impossible to appraise the conditions in this tunnel. However, it is planned to expend not more than $15,000.00 on the above work. The underground work outlined in our original application is unchanged.

In accordance with your suggestion, we have arranged to rent an air compressor and bulldozer for the sum of $212.00 and $445.00 per month respectively rather than the hourly basis shown in our application.

We plan to use the following number of men in connection with this revised work program:

1. One bulldozer operator

2. Four laborers for test pit digging

3. Two miners, two helpers and two trammers for reopening the No. 8 adit.

4. One superintendent

5. One part-time assayer.

(Continued)

We hope that the above revisions will be acceptable and that the contract can be entered into as promptly as possible.

Sincerely yours,

OLD DOMINION MANGANESE CO., INC.

Paul J. Bertelsen

Paul J. Bertelsen
Vice-President

PJB/dag

Please reply to:

Mr. Paul J. Bertelsen
% F. Eberstadt and Co.
39 Broadway
New York City, N. Y.

Digby 4-3644 Mr. Lewis

FILE COPY
SURNAME:

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

Selfridge
Mutt

FEB 21 1952

Mr. Paul J. Bertelsen, Vice-President
Old Dominion Manganese Company, Inc.
219 Virginia Street, West
P. O. Box 2388
Charleston, West Virginia

Re: Docket No. DMEA 2359 - Manganese
Mineral Ridge Mine
Shenandoah and Frederick Counties,
Virginia

Dear Mr. Bertelsen:

The above-referenced application, together with other information available to us in Washington that relates to the subject mine, has been carefully reviewed by this office.

During the review it was noted that certain work and rehabilitation had been included in the proposed project which cannot be considered as exploration under the rules and regulations governing this Administration. The stripping of the outcrop for a distance of 300 feet across a width of 65 feet and to a depth of 25 or 30 feet would be primarily for mining and therefore cannot be considered as exploration. If information concerning the extension of the orebody at the surface is desired, it can be obtained by cross trenching at intervals along the outcrop, an allowable exploration procedure.

Only that rehabilitation necessary to provide housing and facilities for the exploration crew and equipment would be allowable under this program. Thus, any repairs to the mill building, other fixtures or improvements, and equipment not of direct benefit to the proposed exploration project, would necessarily be for Company account. During the operation of the property, costs of all production activities would be excluded from the exploration costs, or where overlapping occurred, supervision, engineering, etc., the costs would have to be equitably divided between the project cost and company account.

The submitted information mentions an ore grade which is seemingly much higher than the average for such deposits as indicated by past experience. The review of all the available information suggested that surface trenching at intervals along the outcrop would be in order before much underground work was done. The trenching would not necessarily entail stripping across the entire width of the minor folds but just across the limb of the fold that is sectioned by the

earth's surface. In addition, it might be worthwhile to learn more about the ore underground, before driving a new adit, by reopening the No. 8 adit with an open cut at the portal to learn what is exposed in it. Possibly a raise from the No. 8 to the bottom of the ore would help determine at just what elevation the new adit should be driven. Mr. Guthrie should be able to comment on the feasibility of reopening the No. 8 adit from a heavy ground viewpoint.

Since your application has included items not directly related to exploration, including 28 laborers , which is an excessive number for exploration, will you please revise it. The extent of the revision will depend on whether or not you wish to trench or reopen the No. 8 adit. The proposed underground work would remain the same.

When submitting the revision, please include the following:

(1) A time schedule or rate of advance for each phase of the proposed work, with a break-down of costs and amounts into items such as supervision, labor, materials, supplies, rentals, assays, power, etc., instead of a lump sum covering everything.

(2) List items to be furnished by the company, with their individual values.

For the underground work it would appear advantageous to rent the compressor on a monthly basis rather than an hourly one.

If we can be of further assistance in the revision of your application, please let us know.

Sincerely yours,

George C. Selfridge

cc 2/21

G. C. Selfridge, Chief
Iron and Ferro-Alloy Division

GCSelfridge:ls
2/20/52

cc: Admn. Reading File
Docket
Field Team, Region VIII
N. B. Melcher, USBR
M. D. Crittenden, USGS
G. C. Selfridge

To Mr. Tully of RFC

Feb. 14, 52

Re: Old Dominion Manganese Co.
Shenandoah & Frederick Counties
Virginia

Re: DMEA 2359 Manganese
Paul J. Bertelsen, Vice Pres.
Application for $60000.00

Property acquired from the:
American Alloys Corp.
Who, sometime in the 1940's, may have borrowed
$75000.00 from RFC:
$11850 on Aug 12-41
$20000 on Oct. 20-41
on Feb. 2-43 Confirm at $12500.00 in full settlement

Questions: Was this money borrowed?

Present status of RFC interest?

(2)

IN REPLY REFER TO:

G-MD-MDC

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

February 14, 1952

Memorandum

To: George C. Selfridge, DMEA

From: Max D. Crittenden

Subject: DMEA 2359 Mineral Ridge Mine

The applicant proposes to spend a total of $45,000 to explore and develop the Mineral Ridge mine, located 11½ miles north of Woodstock, Shenandoah County, Virginia. This property has been operated intermittently since 1834 and the total known production is:

Year	Production (long tons)	Operator
1834-1920	3500	Unknown
1920-1929	6440	Hygrade Manganese Co.
1929-1932	3540	Hygrade Manganese Prod. & Sales Co.
	13480	

Mineral Ridge mine is on a NE-trending ridge capped by the outcrop of Oriskany sandstone which overlies the ore. The formations dip SE a little steeper than the slope of the hill. Manganese oxides occur in residual clay and sand derived from the New Scotland limestone which underlies the Oriskany sandstone. The ore is irregularly distributed through a zone 15-30' thick. Surface workings, together with underground workings on 3 levels, indicate that some mineralization is present over a total distance of 2500' along the ridge. It was found to continue below the level of the No. 6 tunnel, 130' vertically below the outcrop, but was not found to extend as deep as the No. 8 tunnel, 200' vertically below the outcrop.

Mineral Ridge mine was examined by the Geological Survey during World War II, and by the Bureau of Mines in February 1950. The information obtained by the Geological Survey is summarized in a published report by W. H. Monroe, Bull. 936-E. At the time of this examination the underground workings had caved and were inaccessible. A number of samples were taken in the surface cut, and on the basis of

copy received
1 + 7 pr

these samples the Bureau of Mines estimated reserves of 200,000 tons averaging about 4 percent Mn. The most complete information available about the underground workings is contained in a report by J. S. Grasty which was accompanied by maps of the underground workings and abundant samples. Copies of these maps are attached to the application. The grade of ore sampled by Mr. Grasty was 20-35 percent Mn. This is far different from the grade of anything now exposed in the open pit where assays from a few percent to 10 percent are as high as can be found. The Geological Survey has no way of verifying the sample data contained in Mr. Grasty's report.

The present application is accompanied by a report by Walter A. Rukeyser based largely on Grasty's sampling, supplemented by information supplied by a former employee of the Hygrade Manganese Co. Mr. Rukeyser assumes a block nearly 1500 feet long and 125 feet down dip, and using a factor of 0.6 derived from Grasty's maps, for the amount of mineralized ground, he calculates a total reserve of 168,000-180,000. The average grade is assumed to be 20-30 percent Mn.

There is almost no evidence to indicate that these reserves actually exist. Recent sampling at the surface does not bear out the grade of the earlier samples, and there is no information by drilling or otherwise. Consequently, the prospects for discovery of [redacted] ore in this area are at best fair.

Rukeyser outlines the work proposed under the exploration contract as follows: (1) extending the existing open cut a distance of 1200' NE along the ridge to cover the area of known mineralization, and (2) a new adit at about the level of the No. 6 tunnel, and extending northward beneath the open pit.

The basis for the proposed open cut is a report that ore exists at the depth of 25 to 35' in old open cuts and shafts, but unfortunately none of these workings are accessible, and it is impossible to determine whether the amount of ore present in this area warrants stripping the entire mass of overburden. Actually the proposed operation resembles development more than exploration. The proposed underground working is designed to explore the block of ground north of the present workings, and extending down dip from the proposed open cut.

Recommendation

In view of the discrepancies in grade between the sampling reported by Grasty and that which has been reported by the Bureau of Mines, it is suggested that the exploration proposed be undertaken in at least 2 steps, the first to consist of limited surface prospecting

by trenches across the outcrop north of the existing open cut. If such work proved the existence of a good grade of ore in this area the more extensive stripping proposed by the applicant could then be undertaken. Instead of driving the 120' crosscut halfway between the No. 6 level and the No. 8 level, as proposed by the applicant, it is suggested that the No. 8 adit be rehabilitated. Mr. Monroe has suggested that the sandstone of the hanging wall will ordinarily support these workings except near the portal and near the contact with the weathered limestone at the ore horizon. If this working is found to be open, it would be possible to re-sample the orebody at that level, and to accomplish the new drifting proposed without starting an entirely new crosscut through the hanging wall.

EXPLORATION

Subject: DMEA-2359
Re: Exploration Loan
Mineral Ridge Mine
February 4, 1952

Mr. Paul J. Bertelsen, Vice President
Old Dominion Manganese Company, Inc.
219 Virginia Street, West
Post Office Box 2388
Charleston, West Virginia

My dear Mr. Bertelsen:

This will acknowledge receipt of your application dated January 23, 1952 for a loan under the Defense Production Act of 1950.

Your application was assigned Docket Number DMEA-2359 and referred to the Iron & Ferro-Alloys Division.

Kindly refer to DMEA-2359 in any future correspondence relating to your application.

Sincerely yours,

ROBERT E. ADAMS

Robert E. Adams
Acting Administrative Officer

7862