DMEA Form 9
Rev. 6/57

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE Idm-E NO. 264 DMEA NO. 2286

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- [ ] Withdrawn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
- [ ] Termination Notice or Agreement
- [ ] Recision Notice
- [ ] Assignment of Contract
- [ ] Contract Amendments
- [x] Contract with all exhibits and annexes
- [ ] Owner's Consent to Lien and Subordination Agreement
- [x] Application and attachments

Right Side

- [ ] 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
- [ ] On-site Exam Report (Tab)
- [x] Settlement Sheets
- [ ] Drill Logs

Additional Folders:

Left Side

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

Right Side

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

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

Folders No._____: Settlement Sheets

Folders No._____: Drill Logs

Folders No._____: Royalty material

17963

FILE COPY
SURNAME:

Hearne
Hawk
Gorgas
Hoffhines
Chandler
Thayer
Hodges
Lethridge.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C. 600

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

To: National Lead Company, a Corporation
111 Broadway
New York 6, New York

Pursuant to the provisions of Exploration Project Contract No. DMA-2264, dated May 12, 1952 (Docket No. DMA-2286), hereinafter called the "Contract", between you and the United States of America, hereinafter called the "Government", to establish and fix the claim and lien of the Government under the terms of the Contract, the Government hereby certifies that a discovery or development has resulted from the work under the Contract from which commercial production of ore may be made, in or upon that certain property situated in the State of Florida, County of Duval, described as follows:

Section 11, Township 3 South, Range 27 East; Section 12, Township 3 South, Range 27 East, except that portion thereof granted as a right-of-way for State Road No. 10; Section 13, Township 3 South, Range 27 East, except that portion thereof granted as a right-of-way for State Road No. 10; all of Section 14, Township 3 South, Range 27 East, except the South 1/2 of Government Lot 4; Lots 1, 2, 3, and 4, Section 35, Township 3 South, Range 27 East; Fractional Section 36, Township 3 South, Range 27 East, except that portion thereof granted as a right-of-way for State Road No. 10; Lots 3 and 4 and the E 1/2 of the SE 1/4 of Section 26, Township 3 South, Range 27 East; Section 25 Township 3 South, Range 27 East, except that portion thereof granted as a right-of-way for State Road No. 10; Section 24, Township 3 South, Range 27 East, except that portion thereof granted as a right-of-way for State Road No. 10.

The Government's estimate of said discovery or development is particularly described and delimited as follows:

Commercial tonnages of rutile and ilmenite have been outlined and may be recovered by standard practice.

THE UNITED STATES OF AMERICA

By C D Mattessary
Administrator
Defense Minerals Exploration Administration

Dated: JAN 2 1 1953

LFBearne:gad 12/23/52

Copy to: Admr. L. Fla
Operating Committee
Mr. Morgan, 404
Field Team, Region VII (2)
Mr. Chambers
Mr. Thayer, 5216 GSA Bldg.
Mr. Jess Larson, DMA
Mr. F. E. Johnson
Mr. Rutkland, 6030
Mr. Hawk
Docket File

[redacted]

[redacted]

[redacted]

[illegible] OF EXCEPTIONS

National [illegible] Company, [illegible], [illegible]-2286

Claimed by Operator on [illegible]-104		
February	$ 3,536.16	
May, June and July	17,461.00	$2[illegible]
Exceptions:		
(a) Pay of drillers and drill helpers for February 19-2[illegible] completion of exploratio[illegible]	$ 337.78	
(b) Services of superintendent for February [illegible], one work day prior to date of contract	19.84	
(c) Excess pay of foreman over rate of $1[illegible].00 per week for 2-1/5 weeks from February 4 to 18	360.97	
(d) Excess of claim for independent contract work over invoice	.11	718.70
Total Accepted Cost		$20,278.46

/s/ E. D. Talbert

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

DOCKET NO. DMEA 2286

COMMODITY Rutile

Idm-E264

Docket Copy

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

EXPLORATION PROJECT CONTRACT [1]

IT IS AGREED this 12th day of May, 1952, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and [2] National Lead Company, a corporation, 111 Broadway, New York 6, New York Contract No. Idm-E264, dated February 4, 1952, between the same parties, is terminated and merged into this contract, as to which see Annex 2, attached hereto. 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 Florida, County of Duval, described as follows: [3]

See Annex 1

the Operator represents and undertakes: [4]

[redacted]

(*b*) That the Operator is a lessee, in possession and entitled to possession, [redacted]

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 thirty (30) days from the date of this contract shall commence work on a project of exploration for [5] Rutile in or upon the described land; and shall bring the project to completion within a period of six (6) months from the date of this contract. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

ARTICLE 8. *Payments by the Government.*—(*a*) The Government will pay 75 percent of the allowable costs incurred, as they accrue, in an aggregate total amount not in excess of $15,675.00, which is 75 percent of $20,900.00, 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.* None

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By [signature]
Acting Administrator, Defense Minerals Exploration Administration

NATIONAL LEAD COMPANY
(Operator)

By [signature]

I, , certify that I am the Hoffland / Talbot / Hook secretary of the corporation named as Operator herein; that , who signed this contract on behalf of the Operator, was then of said corporation; that said contract was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

[CORPORATE SEAL]

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

EXPLORATION PROJECT CONTRACT
NATIONAL LEAD COMPANY
DOCKET NO. DMEA-2236

EXHIBIT "A"

Description of the Work

Obtain by dragline 100 tons of mineral sands from four pits, approximately 50x50x32 feet each, at points a,b,c, and d, as shown on map attached hereto. Back-fill the pits, separate the 100-ton sample by gravity methods, dry the sample, make electrostatic and electromagnetic separation of the rutile, ilmenite, and zircon fractions, and deliver the rutile fractions to the Operator's plant at Niagara Falls, New York.

Estimate of Costs

I Independent Contracts. All of the described work is to be performed under an independent contract between the Operator and Humphreys Gold Corporation, Jacksonville, Florida, and the allowable costs of the project referred to in Article 6 of the contract form will be the payments made by the Operator to the independent contractor, plus the amount carried over from Contract Idm-E264 referred to in Annex 2. These estimated costs are the following:

(a)	Carry over from Contract Idm-E264 (subject to audit)		$3,439.00
(b)	Excavation of 100-ton sample and backfill	$11,573.80	
(c)	Trucking 100-ton sample	226.00	
(d)	Pilot-plant gravity separation and drying	1,924.20	
(e)	Magnetic and electrostatic separation	1,500.00	
(f)	Packing and shipping concentrates to Niagara Falls	150.00	
(g)	Contingencies	2,087.00	17,461.00
	Total		$20,900.00

ANNEX I

Section 11, Township 3 South, Range 27 East; Section 12, Township 3 South, Range 27 East, except that portion thereof granted as a right-of-way for State Road No. 10; Section 13, Township 3 South, Range 27 East, except that portion thereof granted as a right-of-way for State Road No. 10; All of Section 14, Township 3 South, Range 27 East, except the South 1/2 of Government Lot 4; Lots 1, 2, 3, and 4, Section 35, Township 3 South, Range 27 East; Fractional Section 36, Township 3 South, Range 27 East, except that portion thereof granted as a right-of-way for State Road No. 10; Lots 3 and 4, and the E 1/2 of the SE 1/4 of Section 26, Township 3 South, Range 27 East; Section 25, Township 3 South, Range 27 East, except that portion thereof granted as a right-of-way for State Road No. 10; Section 24, Township 3 South, Range 27 East, except that portion thereof granted as a right-of-way for State Road No. 10.

ANNEX 2

WHEREAS, these parties are parties to Contract Idm-E264, dated February 4, 1952; and

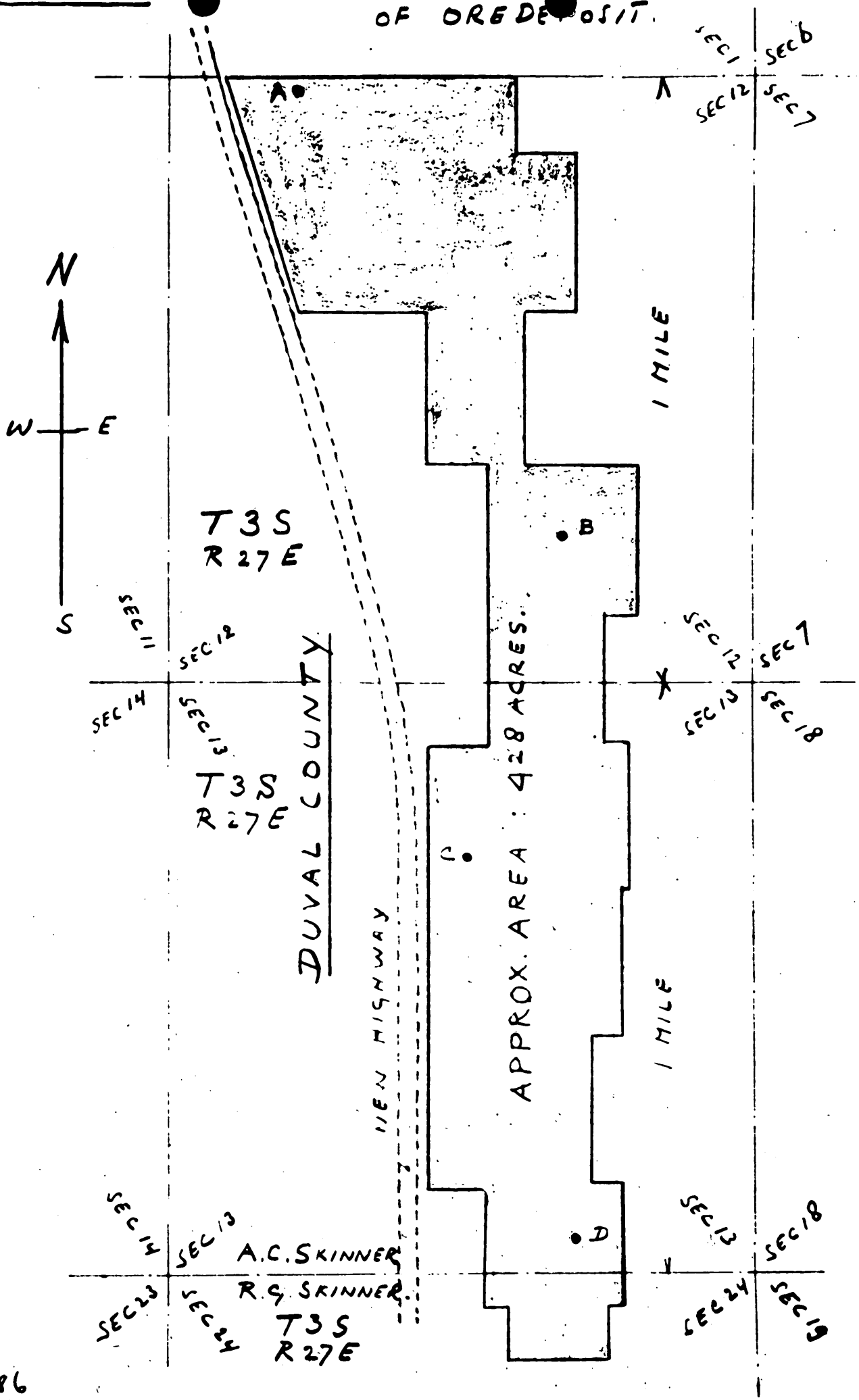
WHEREAS, nearly all of the work described in said Contract Idm-E264 was performed by the Operator before the date of said Contract, i.e., before February 4, 1952, and consequently the Government did not contribute to the costs of said work; and

WHEREAS, the costs of the work performed by the Operator under said Contract Idm-E264 approximated the sum of $3,439.00, subject to final audit;

NOW THEREFORE, it is mutually agreed that said Contract Idm-E264 shall be and is hereby terminated as of the date of the Contract to which this is an annex, and the Operator hereby releases and agrees to save harmless the Government from all claims and demands under or arising out of said Contract Idm-E264, except for the following:

The costs expended by the Operator under said Contract Idm-E264 in a sum in no event greater than $3,439.00, subject to final audit and any necessary correction or revision that will not increase that amount, shall be and is carried over into the new contract to which this is an annex, to be treated as one of the costs of said new contract in which the Government will participate under the provisions thereof.

EXHIBIT A MAP SHOWING LOCATION OF ORE DEPOSIT.



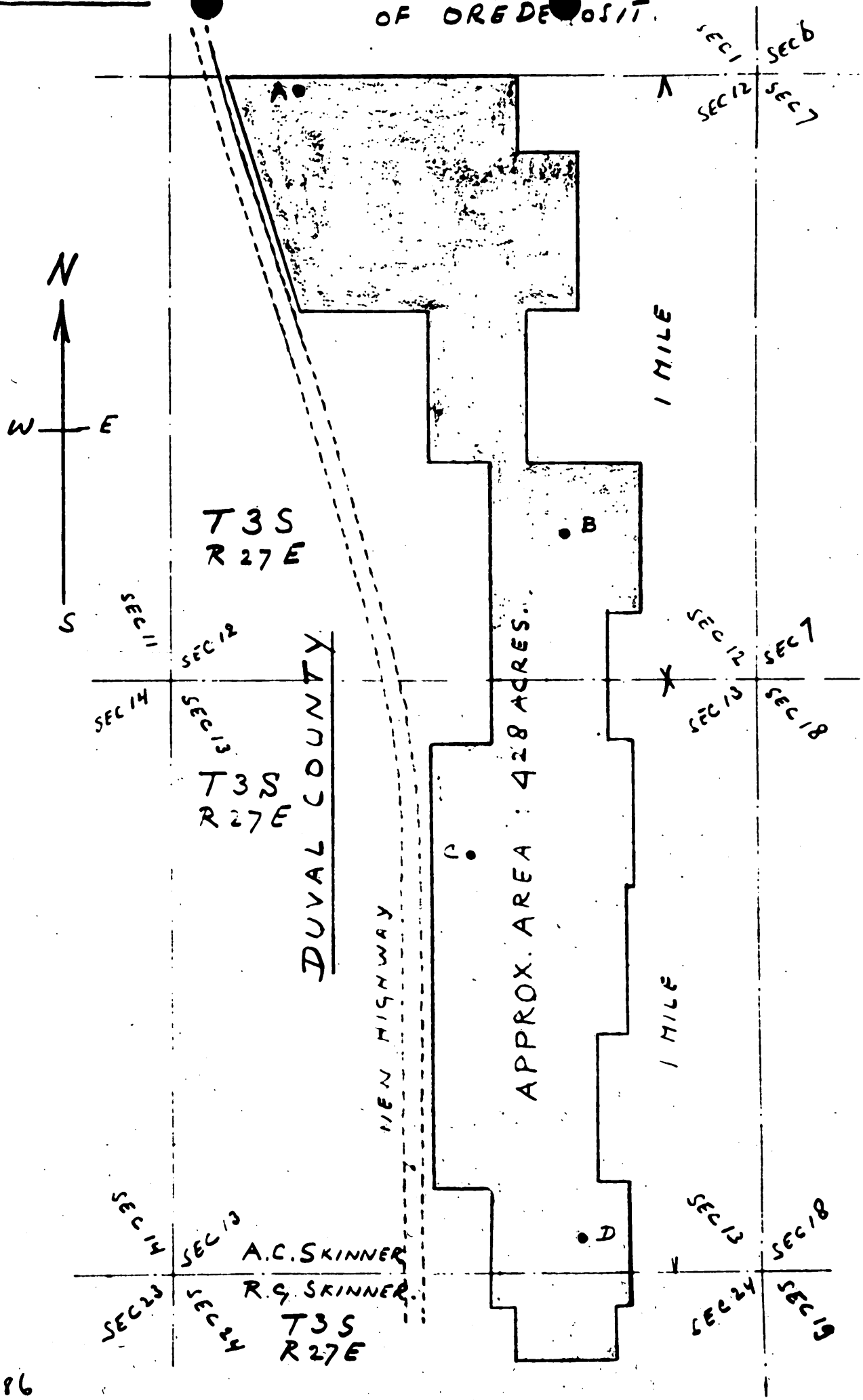
DMEA-2286

Not Road

ANNEX I

Section 11, Township 3 South, Range 27 East; Section 12, Township 3 South, Range 27 East, except that portion thereof granted as a right-of-way for State Road No. 10; Section 13, Township 3 South, Range 27 East, except that portion thereof granted as a right-of-way for State Road No. 10; All of Section 14, Township 3 South, Range 27 East, except the South 1/2 of Government Lot 4; Lots 1, 2, 3, and 4, Section 35, Township 3 South, Range 27 East; Fractional Section 36, Township 3 South, Range 27 East, except that portion thereof granted as a right-of-way for State Road No. 10; Lots 3 and 4, and the E 1/2 of the SW 1/4 of Section 26, Township 3 South, Range 27 East; Section 25, Township 3 South, Range 27 East, except that portion thereof granted as a right-of-way for State Road No. 10; Section 24, Township 3 South, Range 27 East, except that portion thereof granted as a right-of-way for State Road No. 10.

EXHIBIT A MAP SHOWING LOCATION OF ORE DEPOSIT.



DMEA-2286

MF-200
(June 1951)

Docket No. DMA 2286
Commodity Rutile

Idm-E264

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

DOCKET COPY

EXPLORATION PROJECT CONTRACT [1]

It is agreed this 4th day of February, 1952, between the United States of America, acting through the Department of the Interior, Defense Minerals Administration, hereinafter called the "Government," and [2] National Lead Company, 111 Broadway, New York 6, New York

hereinafter called the "Operator," as follows:

1. *Authority for contract.* This agreement is entered into under the authority of the Defense Production Act of 1950, pursuant to Mineral Order 5, entitled "Regulations Governing Government Aid in Defense Exploration Projects."

2. *Operator's property rights.* The exploration project shall be conducted on that certain property situated in the State of Florida, County of Duval described as follows: [3]

See Annex I

with respect to which the Operator represents and undertakes: [4]

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

(*b*) That he is a lessee, in possession and entitled to possession, and the subordination agreement of the lessor is attached.

3. *Exploration project.* The Operator, within thirty (30) days from the date of this contract shall commence work on a project of exploration for [5] Rutile; shall prosecute the work efficiently, expertly, in a workmanlike manner, in accordance with good mining standards, with suitable and adequate equipment, materials, and labor, all properly designed to bring the project to completion within a period of [6] six (6) months from the date of this contract. The exploration project and the work to be performed are more fully described on Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, is made a part of this contract.

4. *Performance of the work.* The work shall be performed by the Operator, under his sole direction and control: *Provided,* That with the consent of the Government and its written approval of the contract or contracts, all or any part of the work may be performed by the Operator through contract or contracts with independent contractors. 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.

5. *Fixtures and improvements.* 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. Any additional facilities, buildings, and fixtures, to be purchased, installed, or erected by the Operator, with the estimated cost of each, to which the Government will contribute currently its agreed pro rata share, are listed in Exhibit "A" attached hereto. The difference between the cost of such additional facilities, buildings, or fixtures, and the salvage value thereof at the conclusion of the work, shall be charged as a cost of the project to which the Government has contributed its pro rata share.

6. *Operating equipment.* Any operating equipment to be rented, purchased, or furnished by the Operator, with the allowable rental, purchase price, or depreciation, as the case may be, is listed under appropriate headings in Exhibit "A" attached hereto. As to equipment purchased for the project, the Government will contribute its agreed pro rata share of the cost thereof, and the difference between the cost and the salvage value at the conclusion of the work shall be charged as a cost of the project to which the Government has contributed its pro rata share.

[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.
[4] Strike out the provision not applicable.
[5] Name of mineral.
[6] Not in excess of 2 years.

7. *Title to and disposition of property.* All facilities, buildings, fixtures, equipment, or other items costing more than $50 each, paid for or purchased with funds contributed jointly by the Operator and the Government, shall belong to the Operator and the Government jointly, in proportion to their respective contributions, and upon the termination of the contract, if they have any salvage value, shall be disposed of for their joint account unless the Government, in writing, waives its interest in any such items. The Government may require the dismantling, severance from land, and removal of any such items in order to realize its interest in the salvage value thereof, and the cost of any such removal and of the disposal of the items shall be for the joint account of the parties in proportion to their respective interests.

8. *Labor and supervision.* An itemized schedule of labor, by numbers and classes (miners, muckers, millmen, etc.), and of supervisors, by numbers and positions, with the maximum wages or salaries that may be paid to each as an allowable cost of the project is set forth in Exhibit "A" attached hereto.

9. *Rehabilitation and repairs.* A statement of the cost of any necessary rehabilitation or repairs to put existing facilities, buildings, installations, and fixtures into useful and operable condition and which are to be allowed as costs of the project is included in Exhibit "A."

10. *Allowable costs of the project.* The costs of the project in which the Government will participate are limited to the necessary, reasonable, direct costs of performing the exploration work, including the costs of materials, supplies, engineering, power, water, analytical work, accounting, and utilities, including items of equipment costing less than $50 each; and the costs referred to in Articles 5, 6, 8, and 9, and the exhibits annexed to and referred to in this contract. Although the Government may pay part of the cost of new or additional facilities, structures, buildings, and equipment, only the depreciation on such items, computed as indicated in Articles 5 and 6, will be charged as a cost of the project. No items of general overhead, corporate management, interest, taxes, or any other indirect costs not expressly allowed by these provisions, 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.

11. *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.

12. *Progress reports.* The Operator shall provide the Government with monthly reports of work performed under the contract upon forms to be provided by the Government. Each monthly progress report shall bear the certification of the Operator and shall constitute the Operator's invoice of costs incurred on the project during the period covered by the report.

13. *Payment to the Operator.* The monthly progress report (invoice), to the extent approved by the Government, shall be processed for payment by the Government. Payment shall be made in the amount of 75 percent of the approved costs incurred; *Provided,* That the aggregate total of all sums paid by the Government under this agreement shall not exceed $31,837.42, which is 75 percent of the agreed estimated total cost of this project, $42,449.90.

14. *Final reports by Operator.* Upon completion of the project or termination of this contract, the Operator shall provide the Government with a comprehensive geologic and engineering report, including an estimate of ore reserves, to the best of his ability. Four copies of all reports shall be furnished to the Government.

15. *Repayment by Operator.* If, upon the completion of the exploration project or termination of the contract, the Government considers that a discovery or development has resulted from the work from which commercial production of ore may be made, the Government, within 6 months thereafter, shall so certify to the Operator, particularly describing and delimiting its estimate of the discovery or the development. Thereafter, if and as ore is produced as a result of such discovery or development, the Operator and his successor in interest shall be and become obligated to pay to the Government a percentage royalty on the net smelter returns or other net proceeds realized from such ore, concentrates, or metal produced within ten (10) years from the date of this contract, until the total amount contributed by the Government, without interest, is fully repaid or said 10 years have elapsed, whichever occurs first, as follows:

Of net smelter returns or other net proceeds not in excess of eight dollars ($8.00) per ton of ore: One and one-half (1½) percent.

Of net smelter returns or other net proceeds in excess of eight dollars ($8.00) per ton of ore: One and one-half (1½) percent, plus one-half (½) percent for each additional full fifty cents ($0.50) in excess of eight dollars ($8.00) per ton of ore, but not in excess of a maximum of five (5) percent.

This obligation to repay from net returns or proceeds shall be and remain a claim and lien upon the mineral deposit which is the subject of the exploration project and upon any production resulting from such discovery or development, in favor of the Government, until fully paid, or until said 10-year period has elapsed; and this claim and lien and the Government's right to repayment shall survive any termination of the contract, whether by completion of the exploration project or otherwise. This article is not to be construed as imposing any obligation on the Operator or his successor in interest to produce ore from any such discovery or development.

16. *No assignment of contract.* Without the written consent of the Government, the Operator shall not assign or otherwise transfer or hypothecate this contract or any rights thereunder.

17. *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 worthwhile 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 render to the Government a full and final accounting of his operations under the contract and his expenditures of money; shall dispose of any unused materials, supplies, and equipment for the joint account of the Operator and the Government in the proportion of their respective interests; and shall pay to the Government its pro-rata share of any money remaining.

Executed in sextuplicate the day and year first above written.

NATIONAL LEAD COMPANY
(Operator)

By [signature]
VICE PRESIDENT

THE UNITED STATES OF AMERICA

By [signature]
Acting Administrator, Defense Minerals Exploration Administration

Hoffman (form)
Hook

U. S. GOVERNMENT PRINTING OFFICE 16—64066-2

ANNEX I

Section 11, Township 3 South, Range 27 East; Section 12, Township 3 South, Range 27 East, except that portion thereof granted as a right-of-way for State Road No. 10; Section 13, Township 3 South, Range 27 East, except that portion thereof granted as a right-of-way for State Road No. 10; All of Section 14, Township 3 South, Range 27 East, except the South 1/2 of Government Lot 4; Lots 1, 2, 3, and 4, Section 35, Township 3 South, Range 27 East; Fractional Section 36, Township 3 South, Range 27 East, except that portion thereof granted as a right-of-way for State Road No. 10; Lots 3 and 4, and the E 1/2 of the SE 1/4 of Section 26, Township 3 South, Range 27 East; Section 25, Township 3 South, Range 27 East, except that portion thereof granted as a right-of-way for State Road No. 10; Section 24, Township 3 South, Range 27 East, except that portion thereof granted as a right-of-way for State Road No. 10.

long form.

EXHIBIT "A" (AMENDED)

Supplement

Description of Work

Expenditures performed under the original Contract approximately subject to audit $3439.00 ~~$12,000.00~~

By dragline obtain 100 tons of mineral sands from 4 pits 50x50x32 at points A, B, C, and D as shown on the accompanying map, back fill pits, separate the 100 ton sample by gravity methods, dry, make electrostatic and electromagnetic separation of the rutile, ilmenite and zircon fractions and have transported the rutile fraction to Niagara Falls, New York.

Estimate of Costs

Carry over from original contract 3439.00 ~~$12,000.00~~

Remove approximately 12,000 yards of overburden and mineral sand obtaining approximately 100 tons sample of mineral sand, back fill pits, transport sample, separate mineral sands by gravity methods, dry sample, transport dried sample, electrostatically and electromagnetically separate rutile, ilmenite, and zircon fractions and transport rutile fractions to Niagara Falls, New York.

12,000 yards @ $1.455 per yard	$17,460.00
Allowable Maximum	~~20,900.00~~ 20,900.00
(a) Excavation of 100 ton sample and refilling of holes 4 pits at least 50x50x32'	$11,573.80
(b) Trucking 100 ton sample	2 26.00
(c) Pilot Plant gravity separation and drying	1,924.20
(d) Magnetic and electrostatic separation by Carpco Engineering	1,500.00
(e) Packing and shipping costs of concentrates to Niagara Falls	150.00
(f) Contingencies	2,087 ~~2,086~~.00
Total Estimated Costs	$17,461.00

17461
3439
20,900

EXPLORATION PROJECT CONTRACT
NATIONAL LEAD COMPANY
DOCKET NO. DMEA-2286

EXHIBIT "A"

Statement of the Work

The work shall be performed in two stages. The Operator shall jet drill (water), sample, assay and test the tracts shown in accompanying Map I, and provide the Government with the maps and assay data resulting therefrom. Work on this project was begun before the date of this contract, and is continuing at the date hereof, but no part of the work performed or cost incurred before the date of this contract shall be considered as part of the project or costs in which the Government will participate.

Stage I

Time required: 3 months

The Operator shall jet drill approximately 207 holes through the ore horizon and not more than 10 feet into the barren sand (approximately 11,000 feet of hole). Two separate and complete drilling units shall be employed. The first line of holes shall start near the corner of sections 12, 13, 7 and 18, and proceed westerly along the section line at approximately 300-foot intervals to the western edge of the tract or to the end of the mineralization, whichever occurs first. The second line will start approximately 1/2 mile south of the beginning hole on the first line and proceed westerly on 300-foot centers. The tract will be drilled on 1/2 mile lines on 300-foot centers until the south boundary of the south tract has been drilled. See Map II attached.

Stage II

Time required: 3 months

Stage II will be undertaken only after the completion of Stage I and with the approval of the Government, which approval will be dependent upon the results of Stage I.

Jet drill approximately 235 holes in 12 lines on same pattern as Stage I beginning on line 10 which is near the SE corner of NE 1/4 of SE 1/4 of Section 36. Line 11 is to begin 1/2 mile north of beginning point of line 10 and proceed in this manner until line 21 is the northern boundary of the tract is drilled.

Estimated Costs

23,000 feet of drilling @ $1.8456 $42,449.90

Details of Estimated Costs

Fixtures and improvements

None

Operating Equipment

To be rented:

1—2½ ton half track truck equipped with C. Kirk Hillman "airplane placer drill" and accessories, all in good operating condition, to be leased from Humphreys Gold Corp. of Jacksonville, Fla., for six months	$ 10.00	
Repairs and maintenance in course of operations and terminal overhaul (estimated) to above equipment	2,500.00	$ 2,510.00

To be furnished by Operator:

1—2½ ton 6 x 6 truck completely equipped with C. Kirk Hillman "airplane placer drill" and accessories, all in good operating condition, valued at $4,545.00, depreciation allowance $75.75 per month for 6 months	454.50	
Repairs and maintenance (estimated) to above equipment	806.16	
1—1½ ton stake body truck valued at $1,600.00, depreciation allowance $26.66 per month	160.00	1,420.66

To be purchased:

Heavy media laboratory complete with screens	1,500.00	
Bromoform for beginning operation	200.00	
Gas and oil 1/	2,574.00	
Laboratory supplies 1/	2,604.68	
Miscellaneous supplies 1/	2,485.60	9,364.28

1/ Based on previous drilling July 30, 1951 to December 23, 1951.

Labor and supervision		
1—Superintendent @$9,200.00 per year	$4,600.00	
1—Foreman @ $102.00 per week	2,652.00	
Workmen's compensation and State and Federal unemployment insurance for the above @ $0.0696	358.57	
4—Drillers @ $75.60 per week each	7,862.40	
8—Drill helpers @ $44.00 per week each	9,152.00	
1—Laboratory technician @ $50.60 per week	1,315.60	
1—Laboratory helper @ $44.00 per week	1,144.00	
Workmen's compensation for the above @ $0.0396	771.17	
State and Federal Unemployment insurance for the above @ $0.03	584.22	$28,439.96
Metallurgical testing		
Concentrating composite sample		
8 laboratory man days @ $50.00 per man day		400.00
Preparing report		
3 man days @ $50.00 per man day		150.00
Consultant (J. H. Carpenter), 1 day @ $100.00 per man day		100.00
Miscellaneous chemicals and supplies		65.00
Estimated total		$42,449.90

3. (a) It is planned to drill cross sections (East-West) on 300 feet centers (See Exhibit D) The cross sections will be one-quarter of a mile apart. This will require 470 holes. The depth of each hole is estimated at 50 feet or less. A total of approximately 23,500 feet of hole will be drilled by this procedure. A field laboratory and office will be installed close to the site of drilling. All of the sands obtained from drilling will be retained for test purposes. One third of the sample obtained will be used for heavy mineral determination by standard heavy liquid separation procedures. Two thirds of the sample will be retained for determination of individual mineral composition of the total heavy mineral. All of the above work will be performed by our own crews with the exception of electro-magnetic separations and determinations of individual mineral content of the heavy minerals, which will be done by our consultant, Mr. J. H. Carpenter, of Jacksonville, Florida.

The costs of the above described work are estimated as follows:

Equipment

Quantity	Item	Value	Depreciation Allowed*
1	2½ ton 6x6 Truck, complete with C. Kirk Hillman "Airplane Placer Drill" and accessories	$4,545	$454.50
1	2½ ton Halftrack Truck, equipped with C. Kirk Hillman "Airplane Placer Drill" and accessories	6,300	2500.00**
1	1½ ton Stake Truck	1,600	160.00
		Total	$3114.50

Expendable Supplies, Fixtures and Improvements

Amount	Item	Cost
300 ft.	Sullivan EX flush coupled casing	$450
300 ft.	1½" double strength black pipe	300
	Valves, couplings	450
	Laboratory (for determinations of heavy mineral grade, screen analysis, etc.	1500
	Laboratory supplies: (Bromoform, etc., for start of operations)	200
		$2900

*On N.L.Co. owned equipment, allowable depreciation taken at 1/60 of value per month.

**Equipment not owned by N.L.Co. - Leased from Humphreys Gold Corp., Jacksonville, Fla.

(a) Contd.

Estimated Operating Costs

Supervision	Per Wk.	Expenses Per Mo.	6 Month Period
Superintendent			
Salary		$417	$2500.00
Rental of house		100	600.00
Personal expenses (Misc. travel at 7¢ per mi., meals, hotel bills, etc.		250	1500.00
		$767	$4600.00
Foreman	$102	-	2652.00
			$7252.00
Workman's Compensation ($2500 and $2652) x $0.0396			204.02
State and Federal Unemployment Insurance ($2500 and $2652) x $0.0300			154.46
Total Supervision			$7610.58

Labor	Hrs. p/Wk.	No. in Crew	Rate p/Hr.	Wages p/Wk.	6 Mo. Period
Driller*	40	4	$1.265	$302.40	$7862.40
Driller Helper	40	8	1.10	352.00	9152.00
Lab. Technician	40	1	1.265	50.60	1315.60
Lab. Helper	40	1	1.10	44.00	1144.00
					$19,474.00
Workman's Compensation ($19,474 x $0.0396)					771.17
State and Federal Unemployment Insurance ($19,474 x $0.0300)					584.22
Total Labor					$20,829.39
Total Supervision and Labor					$28,439.97

Repairs to Equipment		
2 Drill Rigs **	$127.16	$3306.16
Supplies**		
Gas and Oil	99.00	2574.00
Laboratory	100.18	2604.68
Misc. Supplies	95.60	2485.60
Total Supplies	$294.78	$7664.28
Total Estimated Operating Costs		$39,410.41

* $25 per week allowed for living expenses for drillers imported for this project.

**Based on average cost per wk. of half track drill rig from July 30, 1951 to Dec. 23, 1951.

Estimated Metallurgical Testing Expenses*

Concentrating Composite Sample 8 Laboratory Man-days x 50.00/man-day	$400
Preparing Report 3 man-days x $50/man-day	150
Consultant (Mr. J. H. Carpenter) 1 day @ $100/day	100
Miscellaneous (for chemicals, supplies, etc.)	65
Total Metallurgical Testing Expenses	$715

Expenses of Optioning Skinner Tracts

	Acres	Option Rate Per Acre	Expenses Optioning 6 Mo. Period
A. C. Skinner	1382	$0.50	$691.00
R. G. Skinner	2202½	.50	1101.25
			$1792.25
Grand Total for the Project			$47,932.16

46.139.

42.499.90

* Cost estimate of Mr. J. Hall Carpenter, Jacksonville, Florida (See attached letter.)

Exhibit A. DMEA 2286

Time schedule — Statement of Work.

3 months — The work shall be performed in two stages. The operator shall get drill (water), sample, assay and test the tracts shown in accompanying map I and provide ~~this agency~~ Grant with the maps and assay data resulting therefrom.

Stage I.

The operator shall get drill approximately 207 holes thru the ore horizon and not more than 10 feet into the barren sand (approximately 11,000 feet of hole). Two separate and complete drilling units shall be employed. The first line of holes shall start near ~~section~~ the corner of sections 12, 13, 7 and 18 ~~T 3 S R 27 E~~ and provide westerly along the section line at approximately 300 foot intervals to the western edge of the tract or to the end of the mineralization which ever occurs first. The second line will start approximately 1/2 mile south of the beginning hole on the first line and provide westerly on 300 foot centers. The tract will be drilled on 1/2 mile lines on 300 foot centers until the south boundary of the south tract has been drilled. See Map II attached.

Stage II

Time schedule

3 months

Stage II will be undertaken only after the completion of Stage I ~~to the satisfaction of~~ and with the approval of the Government, which approval will be dependent upon the results of Stage I.

(1) Jet drill approximately 235 holes in 12 lines on same pattern as Stage I beginning on line 10 which is near the SE corner of NE 1/4 of SE 1/4 of Section 36. ~~T 3 N~~ ~~R 2 E~~ Line 11 to begin 1/2 mile north of beginning point of line 10, and proceed in ~~south~~ ~~eastern and north~~ ~~as it should the~~ eastern and southern edge of ~~mineralization be established the operator shall drill only~~ ~~two block 2 Roads~~.

this summer until line 21 in the western boundary of the tract as drilled.

~~[illegible]~~

~~[illegible]~~ @ $1.846 = $ 42449.90

~~[illegible] 42449.90~~

Note :- The cost of the holes drilled prior to the effective date of this contract shall be for the account of the operator and no part of the cost shall be ~~subtracted~~ allowed as a part of the project.

424950

Estimated Costs

Fixtures & Improvements
Not applicable.

Operating Equipment
To be rented
1 - 2½ Ton half track truck equipped with C. Kirk Williams "airplane Blower Duck" and accessories to be leased from Hemphill Gold Corp. in Jacksonville Fla
for six months period — — — — — $10.00

Repairs (estimated) to above equipment — $2500.00

To be purchased by operator
1 2½ Ton 6x6 truck completely equipped with C. Kirk Williams "Airplane Blower Duck" and accessories valued at $4545, ~~@ 6/60~~ ~~454.50~~
estimated upon installation of equipment — 806.16

1 1½ Ton stake body truck valued at $1600. — 160.00
Depreciation allowance $26.66 per month for six months

To be purchased.
Heavy wooden loading chute with screen — $1500.00
Bromoform for beginning operation — 200.00
(1) Gas and oil — 9574.00
(1) Lubricating supplies — 264.60
(1) Miscellaneous supplies — 2485.60
(1) Bond on previous drilling July 30, 1950 to Dec 23, 1951

13,294.94

Depreciation allowance $75.75 per month for 6 months — — — — $454.50

Labor & Supervision.

Supervision

1 Superintendent @ $92.00 per year	$4600
1 Foreman @ $102 per week	2652
Workmen Compensation & State & Federal Unemployment insurance @ $0.0696 ($5152 x .0696)	358.57
	7610.57

Labor

4 Drillers @ $75.60 per week	7862.40
8 Drill helpers @ $44.00 per week	$9152.00
1 Laboratory technician @ $50.60 per week	1315.60
1 Laboratory helper @ $44.00 per week	1144.00
Workmen Compensation @ $0.0396 (19447.1)	771.17
State and Federal Unemployment Insurance @ $0.03	584.22
	20,829.39

Metallurgical Testing

Concentrating Composite Sample

8 laboratory man days @ $50.00 man day	400.00
Preparing report	
3 man days @ $50.00 man day	150.00
Consultant (J. H. Carpenter)	
1 day @ $100. per man day	100.00
Misc. chemicals & supplies	65.00
Estimated total testing cost	715.00

Total Contracted Cost $42,449.90

Legal Description continued

and the lands of R.B. Stevens and Annie Mae Stevens, and described as follows: Lots 1, 2, 3, and 4 in T 38 R 27E Section 35, containing 222 acres more or less, Fractional section 36 except that portion thereof granted as right of way for State Road No 10 containing 541 acres more or less and lots 3 and 4 and E 1/2 of SE 1/4 of Section 26 containing 144 1/2 acres more or less and section 25 except that portion thereof granted as right of way for State Road No 10 containing 621 acres more or less. and section 24 except that portion thereof granted as right of way for State Road No 10 containing 643 acres more or less. The total tract containing 2,202 1/2 acres more or less.

AGREEMENT

AGREEMENT MADE AND ENTERED THIS 9th DAY OF JANUARY 1952, BETWEEN THE UNITED STATES OF AMERICA, ACTING THROUGH THE DEPARTMENT OF THE INTERIOR, DEFENSE MINERALS EXPLORATION ADMINISTRATION (HEREINAFTER CALLED THE "GOVERNMENT"), AND NATIONAL LEAD COMPANY, A CORPORATION DULY ORGANIZED AND EXISTING UNDER AND BY VIRTUE OF THE LAWS OF THE STATE OF NEW JERSEY, WITH AN OFFICE LOCATED AT 111 BROADWAY, NEW YORK 6, NEW YORK (HEREINAFTER CALLED THE "OPERATOR"),

W I T N E S S E T H :

WHEREAS, THE OPERATOR HAS ENTERED OR IS ABOUT TO ENTER INTO A CONTRACT WITH THE GOVERNMENT DESIGNATED AS AN EXPLORATION PROJECT CONTRACT FOR THE EXPLORATION OF RUTILE AND ASSOCIATED MONOZITE, ZIRCON AND ILMENITE IN THE STATE OF FLORIDA; AND

WHEREAS, THE SUBORDINATION AGREEMENT OF THE LESSOR OR LESSORS, REQUIRED BY PARAGRAPH 2, (B) OF THE SAID EXPLORATION PROJECT CONTRACT HAS NOT BEEN OBTAINED; AND

WHEREAS, THE GOVERNMENT HAS AGREED TO WAIVE THE REQUIREMENT THAT A SUBORDINATION AGREEMENT BE EXECUTED BY THE LESSOR OR LESSORS,

NOW, THEREFORE, IN CONSIDERATION OF SAID EXPLORATION PROJECT CONTRACT AND OF THE FOREGOING, THE OPERATOR HEREBY UNDERTAKES AND AGREES TO PAY ALL SUMS THAT MAY FALL DUE AND OWING TO THE UNITED STATES OF AMERICA UNDER THE TERMS OF SAID CONTRACT IN THE SAME MANNER AND TO THE SAME EXTENT AS IF THE

SUBORDINATION AGREEMENT OF THE LESSOR HAD BEEN GIVEN. IF FOR ANY REASON THE NET SALES FROM OPERATIONS THAT WOULD BE SUBJECT UNDER SAID CONTRACT TO SUCH PAYMENTS TO THE GOVERNMENT ARE NOT AVAILABLE AS A MEANS OF MEASURING THE AMOUNT OF SUCH PAYMENTS, THEN THE OPERATOR AGREES AND UNDERTAKES TO MAKE SUCH PAYMENTS ACCORDING TO THE BEST ESTIMATES OF THE AMOUNTS THAT CAN REASONABLY BE MADE, AND IN THE EVENT OF DISPUTE AS TO SUCH ESTIMATES, THE OPERATOR AGREES THAT THE DETERMINATION THEREOF BY EITHER THE ADMINISTRATOR OF DEFENSE MINERALS EXPLORATION ADMINISTRATION OR BY THE DIRECTOR OF THE UNITED STATES BUREAU OF MINES SHALL BE FINAL AND BINDING UPON THE OPERATOR.

IN WITNESS WHEREOF, THE PARTIES HERETO HAVE CAUSED THESE PRESENTS TO BE EXECUTED THE DAY AND DATE HEREINABOVE SET FORTH.

NATIONAL LEAD COMPANY

BY _____ VICE PRESIDENT

ATTEST:

_____ SECRETARY

UNITED STATES OF AMERICA

BY _____

STATE OF NEW YORK)
: ss.
COUNTY OF NEW YORK)

ON THIS 9th DAY OF January, IN THE YEAR ONE THOUSAND NINE HUNDRED AND FIFTY-TWO, BEFORE ME PERSONALLY CAME H. T. WARSHOW TO ME KNOWN, WHO, BEING BY ME DULY SWORN, DID DEPOSE AND SAY THAT HE RESIDES IN New York, N.Y. THAT HE IS VICE PRESIDENT OF NATIONAL LEAD COMPANY, THE CORPORATION DESCRIBED IN AND WHICH EXECUTED THE ABOVE INSTRUMENT; THAT HE KNOWS THE SEAL OF SAID CORPORATION, THAT THE SEAL AFFIXED TO SAID INSTRUMENT IS SUCH CORPORATE SEAL; THAT IT WAS SO AFFIXED BY ORDER OF THE BOARD OF DIRECTORS OF SAID CORPORATION, AND THAT HE SIGNED HIS NAME THERETO BY LIKE ORDER.

Evelyn A. Vitzthum
NOTARY PUBLIC

EVELYN A. VITZTHUM
NOTARY PUBLIC, STATE OF NEW YORK
No. 41-4105350
Qual. in Queens Co., Certs. filed with
N. Y. Co. Clk., Queens & N. Y. Co. Registers
Term expires March 30, 1953

AGREEMENT

AGREEMENT MADE AND ENTERED THIS 9th DAY OF JANUARY 1952, BETWEEN THE UNITED STATES OF AMERICA, ACTING THROUGH THE DEPARTMENT OF THE INTERIOR, DEFENSE MINERALS EXPLORATION ADMINISTRATION (HEREINAFTER CALLED THE "GOVERNMENT"), AND NATIONAL LEAD COMPANY, A CORPORATION DULY ORGANIZED AND EXISTING UNDER AND BY VIRTUE OF THE LAWS OF THE STATE OF NEW JERSEY, WITH AN OFFICE LOCATED AT 111 BROADWAY, NEW YORK 6, NEW YORK (HEREINAFTER CALLED THE "OPERATOR"),

W I T N E S S E T H :

WHEREAS, THE OPERATOR HAS ENTERED OR IS ABOUT TO ENTER INTO A CONTRACT WITH THE GOVERNMENT DESIGNATED AS AN EXPLORATION PROJECT CONTRACT FOR THE EXPLORATION OF RUTILE AND ASSOCIATED MONOZITE, ZIRCON AND ILMENITE IN THE STATE OF FLORIDA; AND

WHEREAS, THE SUBORDINATION AGREEMENT OF THE LESSOR OR LESSORS, REQUIRED BY PARAGRAPH 2, (B) OF THE SAID EXPLORATION PROJECT CONTRACT HAS NOT BEEN OBTAINED; AND

WHEREAS, THE GOVERNMENT HAS AGREED TO WAIVE THE REQUIREMENT THAT A SUBORDINATION AGREEMENT BE EXECUTED BY THE LESSOR OR LESSORS,

NOW, THEREFORE, IN CONSIDERATION OF SAID EXPLORATION PROJECT CONTRACT AND OF THE FOREGOING, THE OPERATOR HEREBY UNDERTAKES AND AGREES TO PAY ALL SUMS THAT MAY FALL DUE AND OWING TO THE UNITED STATES OF AMERICA UNDER THE TERMS OF SAID CONTRACT IN THE SAME MANNER AND TO THE SAME EXTENT AS IF THE

SUBORDINATION AGREEMENT OF THE LESSOR HAD BEEN GIVEN. IF FOR ANY REASON THE NET SALES FROM OPERATIONS THAT WOULD BE SUBJECT UNDER SAID CONTRACT TO SUCH PAYMENTS TO THE GOVERNMENT ARE NOT AVAILABLE AS A MEANS OF MEASURING THE AMOUNT OF SUCH PAYMENTS, THEN THE OPERATOR AGREES AND UNDERTAKES TO MAKE SUCH PAYMENTS ACCORDING TO THE BEST ESTIMATES OF THE AMOUNTS THAT CAN REASONABLY BE MADE, AND IN THE EVENT OF DISPUTE AS TO SUCH ESTIMATES, THE OPERATOR AGREES THAT THE DETERMINATION THEREOF BY EITHER THE ADMINISTRATOR OF DEFENSE MINERALS EXPLORATION ADMINISTRATION OR BY THE DIRECTOR OF THE UNITED STATES BUREAU OF MINES SHALL BE FINAL AND BINDING UPON THE OPERATOR.

IN WITNESS WHEREOF, THE PARTIES HERETO HAVE CAUSED THESE PRESENTS TO BE EXECUTED THE DAY AND DATE HEREINABOVE SET FORTH.

NATIONAL LEAD COMPANY

BY _____
VICE PRESIDENT

ATTEST:

_____
SECRETARY

UNITED STATES OF AMERICA

BY _____

STATE OF NEW YORK)
: ss.
COUNTY OF NEW YORK)

ON THIS 9th DAY OF January, IN THE YEAR ONE THOUSAND NINE HUNDRED AND FIFTY-TWO, BEFORE ME PERSONALLY CAME H. T. WARSHOW TO ME KNOWN, WHO, BEING BY ME DULY SWORN, DID DEPOSE AND SAY THAT HE RESIDES IN NEW YORK, N.Y. THAT HE IS VICE PRESIDENT OF NATIONAL LEAD COMPANY, THE CORPORATION DESCRIBED IN AND WHICH EXECUTED THE ABOVE INSTRUMENT; THAT HE KNOWS THE SEAL OF SAID CORPORATION, THAT THE SEAL AFFIXED TO SAID INSTRUMENT IS SUCH CORPORATE SEAL; THAT IT WAS SO AFFIXED BY ORDER OF THE BOARD OF DIRECTORS OF SAID CORPORATION, AND THAT HE SIGNED HIS NAME THERETO BY LIKE ORDER.

Evelyn A. Vitzthum
NOTARY PUBLIC

EVELYN A. VITZTHUM
NOTARY PUBLIC, STATE OF NEW YORK
No. 41-4105350
Qual. in Queens Co., Certs. filed with
N. Y. Co. Clk., Queens & N. Y. Co. Registers
Term expires March 30, 1953

Titanium Alloy Mfg Div
National Lead Co
Exhibit "A"
Proposed Exploratory and Development Drilling of A.C. & R.G. Skinner Tracts
Jacksonville, Florida

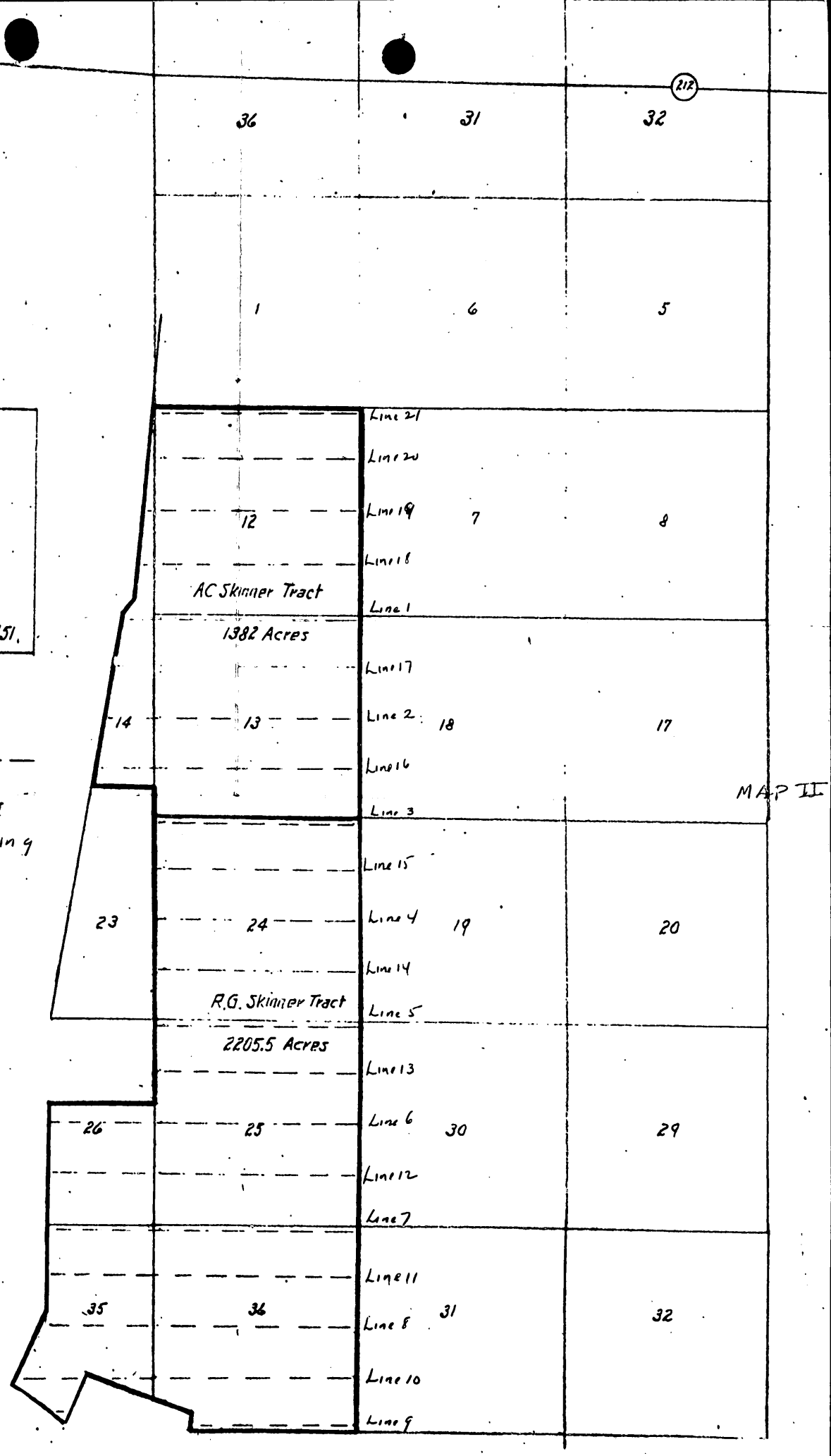
Scale: 1" = 1760' 12/6/51.

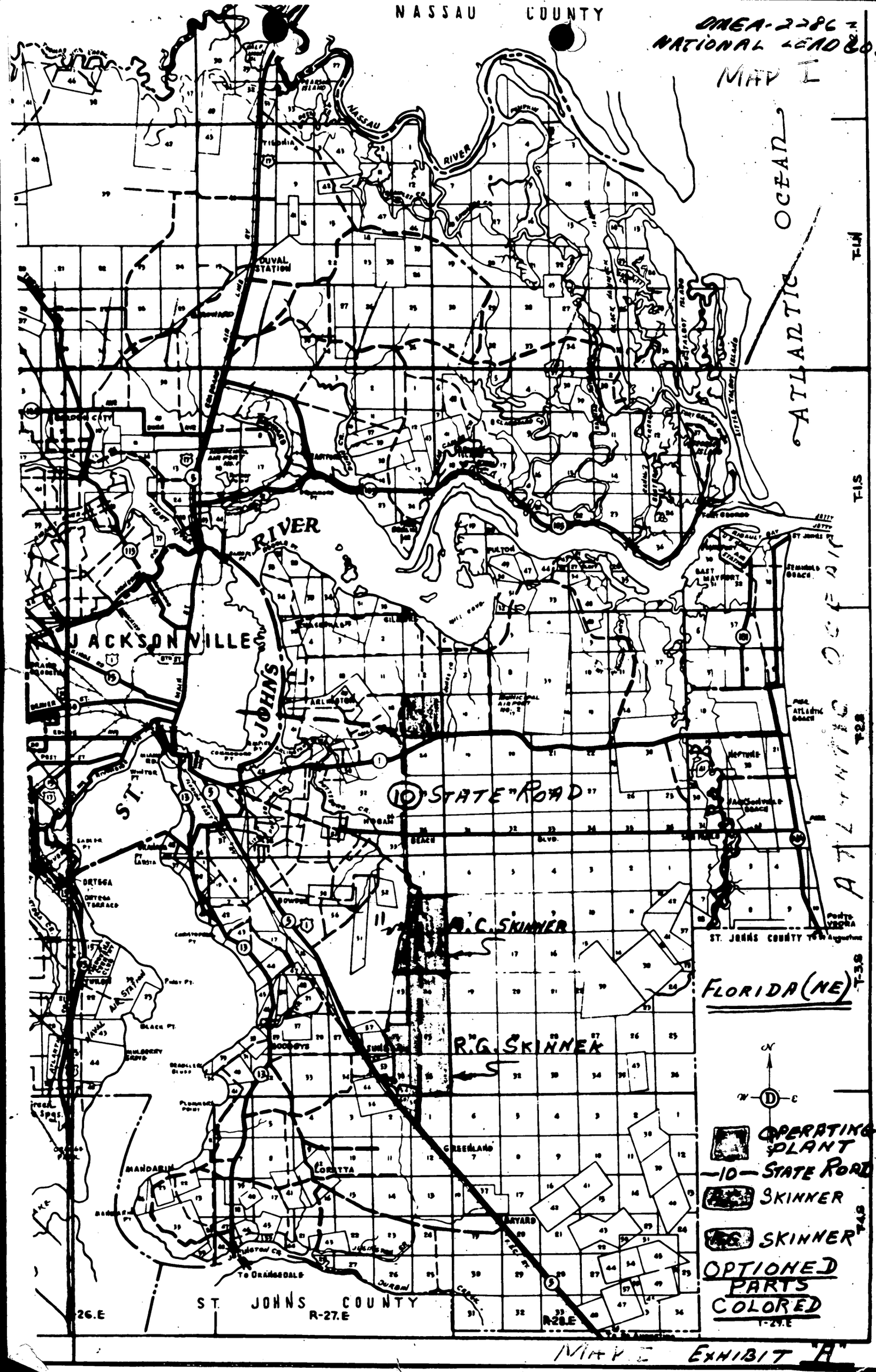
MAP II

Proposed Cross-Sections — —

Drill Holes on 300 ft Centers

Line __ Sequence of Line drilling




NASSAU COUNTY
OMEA-2286
NATIONAL LEAD CO.
MAP I
ATLANTIC OCEAN
NASSAU RIVER
DUVAL STATION
JACKSONVILLE
ST. JOHNS RIVER
STATE ROAD 10
A.C. SKINNER
R.G. SKINNER
ORTEGA
MANDARIN
GREENLAND
LORETTA
HARVARD
ST. JOHNS COUNTY
R-27.E
R-28.E
T-1.N
T-1.S
T-2.S
T-3.S
T-4.S
FLORIDA (NE)
OPERATING PLANT
10 STATE ROAD
SKINNER
SKINNER
OPTIONED PARTS COLORED
MAP I
EXHIBIT "A"

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-2286
Metal or Mineral RUTILE
Date Received 5-2-52
Amount $
Participation (Government %)

Name and address of applicant

NATIONAL LEAD COMPANY
111 Broadway
New York 6, New York

Date March 31, 1952

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

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?

   (*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.

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.

NATIONAL LEAD COMPANY
(Name of company)

By X [signature]
(Signature of authorized official)

March 31, 1952
(Date)

(Title)
Vice President

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

U. S. GOVERNMENT PRINTING OFFICE 16—64067-2

NATIONAL LEAD COMPANY

111 BROADWAY

NEW YORK 6, N.Y.

1. (a) The accompanying map (Exhibit A) indicates in its shaded area the location of the ore body, recently determined by drilling, from which the samples will be taken. This ore body is located in Sections 12, 13 and 24 of Township 3 South, Range 27 East of Duval County, Florida.

The proposed State Road No. 10, running through this property, is indicated by a dotted line.

The properties in which the deposit lies are owned by A. C. Skinner as far as Sections 12 and 13 are concerned and by R. G. Skinner as far as Section 24 is concerned.

(b) Attached are copies (Exhibits B and C) of an "option agreement" permitting exploration, development and purchase of the two parcels of land from which the samples will be taken.

(c) The parcels of land are situated in Duval County, Florida, described as Sections 12, 13 and 24 of Township 3, South, Range 27 East.

2. (a) The main purpose is production of rutile; however, ilmenite and zircon occur in the deposit.

(b) This is a typical Heavy Mineral Beach Sand deposit, similar to those being worked now in that area, with the exception that it is capped by a mantle of overburden.

The area, as blocked out, measures approximately 428 acres and from the drilling the following figures have become evident:

	A. C. Skinner	R. G. Skinner	Total
Acres of mineral sand	403.77	24.23	428.00
Tons Overburden	22,028,400	793,600	22,822,000
Tons mineral sand	7,848,554	551,100	8,399,654
Tons Rutile contained	66,757	3,457	70,214

NATIONAL LEAD COMPANY

111 BROADWAY

NEW YORK 6, N.Y.

3. (a) 1. In four different locations, marked A, B, C and D on the map (Exhibit A) samples of overburden and underlying mineral sand will be removed by dragline excavation to determine the nature of both. Special attention will be paid to the hardness of the various layers and to the amount and the level of the ground water. This procedure is urgently required for a decision on mining methods and the economy of the project.

2. From these diggings a representative sample of about 100 tons total of mineral sand will be prepared. This material shall be trucked to a pilot dressing plant located in the laboratory of Humphreys Gold Corporation near Jacksonville, Florida.

3. Dressing tests will be carried out in this laboratory by experienced engineers to determine the proper way of dressing and the recovery of the various economic heavy minerals. The gravity concentrates recovered in the pilot plant will be dried and forwarded to the laboratory of Carpco Engineering and Machinery Corporation at Jacksonville, Florida.

4. In this laboratory the dried concentrates will be submitted to high tension separation to produce a conductor and a non-conductor fraction.

Both fractions will be treated in a magnetic separator to produce magnetics and non-magnetics. Those manipulations may have to be repeated to produce the highest possible quality and find the most economic recovery of rutile.

5. The so-produced rutile concentrate will be forwarded to Niagara Falls, New York for evaluation at National Lead Company's laboratory.

The costs involved in this project are estimated as follows:

NATIONAL LEAD COMPANY

111 BROADWAY

NEW YORK 6, N.Y.

MP103-Skinner Lands, Duval County, Fla.

1) Excavation of samples and refilling of holes, 4 pits of at least 50'X50'X32'	-	$11,573.80
2) Trucking of 100 tons ore samples	-	726.00 high
3) Pilot plant gravity separation and drying	-	1,924.20
4) Magnetic and Electrostatic Separation by Carpco Engineering	-	1,500.00
5) Packing and shipping costs of concentrates to Niagara Falls	-	150.00
6) Contingencies 10%	-	1,586.00
Total Estimated Costs	-	$17,460.00

(b) Work on this project can be started within four weeks after the requested aid is granted. The time required to complete the project is estimated at about four months.

NATIONAL LEAD COMPANY

111 BROADWAY

NEW YORK 6, N.Y.

MF103-Skinner Lands,Duval County,Fla.

4. The property and the location of the holes are indicated on the map. (Exhibit A)

NATIONAL LEAD COMPANY

111 BROADWAY

NEW YORK 6, N.Y.

MP103-Skinner Lands,Duval County,Fla.

5. National Lead Company does not own any facilities,etc. to perform this work. All equipment and installations must be rented from the Humphreys Gold Corporation and the Carpco Engineering and Machinery Company which are experts in this field and well qualified to do the job.

contract

NATIONAL LEAD COMPANY

111 BROADWAY

NEW YORK 6, N.Y.

MP103-Skinner Lands,Duval County,Fla.

6. None.

NATIONAL LEAD COMPANY

111 BROADWAY

NEW YORK 6, N.Y.

MF103-Skinner Lands, Duval County, Fla.

Rentals

7. (a) 1 - 30-ton lowboy for dozer transportation, 10 hours @ $12.50 hour: - $125.00 who distance contract

1 - 50-ton lowboy to transport dragline, 20 hours @ $15.00 hour: - 300.00 who distance contract

1 - 4" Gasoline pump, 2 months @ $94.00 per month: - 188.00

2 - 20' lengths of 4" suction hose, 2 months @ $28.75 per month each: - 115.00

5 - Ton Dump truck time for hauling samples, 128 hours @ $4.50 per hour: - 576.00 daily hours

1 - 2-yard Dragline with 57' boom, 560 hours @ $6.00 per hour: - 3,360.00

1 - D7 Tractor, 280 hours @ $5.00 per hour: - 1,400.00

1 - 7-ton half-track, 560 hours @ $1.00 per hour: - 560.00

1 - 2" gasoline pump, 2 months @ $60.00 per month: - 120.00

1 - Spiral test plant complete, 15 days @ $100.00 per month: - 50.00

1 - Dry mill test plant, 1 month @ $700.00 per month: - 700.00

GRAND TOTAL: $7,494.00

(b) None.

(c) None.

8. DRAGLINE AND BACKFILL OPERATION

Dragline Operator	-560 hours-	467 hrs.@ $1.55 hr.	
		- 93 hrs.@ 2.33 hr. -	$ 941.00
Dragline Oiler	-560 hours-	467 hrs.@ $1.04 hr.	
		- 93 hrs.@ 1.56 hr. -	$ 631.00
Tractor Operators	-280 hours-	233 hrs.@ $1.40 hr.	
		- 47 hrs.@ 2.10 hr. -	$ 425.00
Truck Driver	-560 hours-	467 hrs.@$ 0.94 hr.	
		- 93 hrs.@ 1.41 hr. -	$ 570.00
Engineering and supervision -		-	$ 900.00
Mechanic 1st Class	- 80 hours-	67 hrs.@ $1.51 hr.	
		- 13 hrs.@ 2.27 hr. -	$ 131.00
			$3,598.00
Additional charges: Social Security,etc. 10%		-	$ 359.80
TOTAL:		-	$3,957.80

SPIRAL TEST OPERATION

2 Engineers @ $400. month each,for 15 days		-	$ 400.00
Supervision @ $500. month, 15 days		-	$ 250.00
1 Spiral Operator	-120 hours-	100 hrs.@ $1.12 hr. -	
		- 20 hrs.@ 1.68 hr. -	$ 146.00
2 Spiral Helpers	-120 hours ea.	200 hrs.@$1.04 hr.-	
		40 hrs.@ 1.56 hr.-	$ 270.00
4 Laborers	-120 hours ea.	400 hrs.@$0.88 hr.-	
		80 hrs.@ 1.32 hr.-	$ 456.00
			$1,522.00
Additional charges: Social Security,etc. 10%		-	$ 152.20
TOTAL:			$1,674.20

NATIONAL LEAD COMPANY

111 BROADWAY

NEW YORK 6, N.Y.

MF103-Skinner Lands, Duval County, Fla.

(8. Continued):

DRY MILL TESTING OPERATION

1 Engineer	- One-half month	-	$200.00
1 Analyst	- One-half month	-	200.00
Supervision	- One-half month	-	250.00
			$650.00
Additional charges: Social Security, etc. 10%			65.00
GRAND TOTAL:			$6347.00

NATIONAL LEAD COMPANY

111 BROADWAY

NEW YORK 6, N.Y.

9. OPERATING SUPPLIES

Diesel fuel, 3800 gallons @ $0.14 gal.	-	$ 532.00
Lubricating oil, 300 gallons @ $0.65 gal.	-	$ 195.00
Gasoline, 1,000 gallons @ $0.25 gal.	-	$ 250.00
70', 58" Lang lay 6X19 hemp core @ $15.20 C'	-	$ 11.00
175' 7/8" Lang lay 6X19 hemp core @ $34.44 C'	-	$ 60.00
150' 1" Lang lay 6X19 steel core @ $33.44 C'	-	$ 50.00
Maintenance parts	-	$ 500.00
TOTAL	-	$1,598.00
ASSAYING	-	$ 285.00
GRAND TOTAL:	-	$1,883.00

(a) Cost of Packing and Shipping Concentrates to Niagara Falls: - $ 150.00

NATIONAL LEAD COMPANY
111 Broadway
New York 6, N. Y.

10. (a) We are prepared to invest 25% of the total estimates, or $4,365.00, in the proposed project. In addition, we are prepared to assume all costs of test and research work on the concentrates to be carried out at our Niagara Falls facilities.

(b) Yes.

NATIONAL LEAD COMPANY

111 BROADWAY

NEW YORK 6, N.Y.

MF103-Skinner Lands,Duval County,Fla.

11. None.

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-2286
Metal or Mineral
Date Received 12-12-51
Amount $
Participation (Government %)

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 12 1951

NATIONAL LEAD COMPANY
111 Broadway
New York 6, N. Y.

Name and address of applicant

Date

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

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?

   (*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.

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.

NATIONAL LEAD COMPANY

Vice President (Name of company)

By (Signature of authorized official)

(Date)

(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

Form MF-103

UNITED STATES DEPARTMENT OF THE INTERIOR

Defense Minerals Administration

Application for Aid for an
Exploration Project Pursuant to
Mineral Order 5, Under
Defense Production Act of 1950

NATIONAL LEAD COMPANY
111 Broadway
New York, N. Y.

Date_____

1. (a) The accompanying map (Exhibit A) indicates the area in which it is planned to carry on the exploration work outlined in this application.

Two adjoining ownerships are involved:

A. C. Skinner, 1382 acres, more or less
R. G. Skinner, 2202½ " " " "

The proposed State Road No.10, running East then South from Jacksonville, Florida, runs through the above properties. This road runs east from Jacksonville about three miles; it then turns south about four miles to the north boundary line of the A. C. Skinner land; it continues south for two miles across and to the south boundary of the said land, which is also the north boundary of the R. G. Skinner land; it continues south for three miles across the R. G. Skinner land and then it crosses the south boundary of the said land. This proposed State Road No.10 then continues south about 3/4 of a mile, where it enters State Road No.5. This point is about 10½ miles southeast of Jacksonville on the State Road No.5. The Florida East Coast Railway also parallels this State Road No.5.

(b) Attached (Exhibit B and C) are copies of an "option agreement" permitting exploration, development and purchase of the two parcels of land to be explored.

(c) LANDS OF A. C. SKINNER (See Exhibit B)

Those certain tracts or parcels of land, all being situate in Duval County, Florida, as shown on U.S.Government Survey, and more particularly described as:

Section 11, Township 3 south
Range 27 east.

Section 12, Township 3 south,
Range 27 east, except that portion
thereof granted as a right-of-way
for State Road No.10.

Section 13, Township 3 south,
Range 27 east, except that portion
thereof granted as a right-of-way
for State Road No.10

All of Section 14, Township 3 south,
Range 27 east, except the south 1/2
of Government Lot 4.

Consisting of a total of 1382 acres, more or less.

LANDS OF R. G. SKINNER and ANNIE MAE SKINNER (See Exhibit C)

Those certain tracts or parcels of land, all being situate in Duval County, Florida, as shown on U. S. Government Survey, and more particularly described as:

Lots 1, 2, 3 and 4, Section 35, Township 3 south, Range 27 east, containing 222 acres more or less.

Fractional Section 36, Township 3 south, Range 27 east, except that portion thereof granted as a right-of-way for State Road No. 10, containing 591 acres, more or less.

Lots 3 and 4, and the E 1/2 of SE 1/4 of Section 26, Township 3 south, Range 27 east, containing 144½ acres, more or less.

Section 25, Township 3 south, Range 27 east, except that portion thereof granted as a right-of-way for State Road No. 10 containing 621 acres, more or less.

Section 24, Township 3 south Range 27 east, except that portion thereof granted as a right of way for State Road No. 10 containing 624 acres, more or less.

Consisting of a total of 2,202½ acres, more or less.

Note: (1) Both areas described in (a) and (c) are the same.

(2) See attached option agreements (Exhibit B and C)

Liens or encumbrances against the properties above described: a title check will be made if application is approved.

2. (a) This exploration is for Rutile. Small amounts of monazite, zircon, ilmenite, etc., are present in this Heavy Mineral deposit but the amount is too low a grade to be of economic importance under existing physical and competitive conditions.

(b) The Geological features of the property are:

This is a typical Heavy Mineral Beach sand deposit similar to the various ones now being worked in that area, with the exception that it does have a mantle of barren sand over its surface. The commercial concentrations are lensy and must be located and then detailed by drilling. Careful sampling is required for the estimating of the economical areas. (See Cross-section Exhibit E)

Attached is Exhibit D showing the planned test drilling on the acreage under consideration and Exhibit E shows drilling already completed by the Company and indicating commercial mineralization.

The attached Exhibits need not be returned.

3. (a) It is planned to drill cross-sections (East-West) on 300 feet centers (see Exhibit D). The cross-sections will be one-quarter of a mile apart. The depth of drilling is to extend to ten (10) feet below the estimated mineral zone. This depth will probably be reached at 50 feet or less for each hole.

The costs are estimated as follows:

Actual Cost of Repairs and Upkeep[1] on:		
2 Drills and Sampling equipment complete	$8,800.00	
300 feet Sullivan Ex flush coupled casing	450.00	
300 feet 1½ inch double strength black pipe	300.00	
Values, pipe couplings	450.00	
Total		$10,000.00
Field office and laboratory		
Sink Float test laboratory	1,500.00	
Laboratory Supplies	200.00	
Total		1,700.00
Operating Costs		
23,500 feet drilling @ $1.50 (based on past experience)		35,250.00
Metallurgical Testing		
Preparing Samples	240.00	
Testing	1,440.00	
Engineer	800.00	
Total		2,480.00
Miscellaneous		3,790.00
Total		53,220.00
Less Salvage on field office and laboratory		500.00
TOTAL EXPENSE for the Project		$52,720.00

Note (1) Based on actual experience in the field. As only maintenance and repairs, sufficient to keep the equipment in good order, are used in the above costs, then there would be no salvage value to consider except on the field office and laboratory.

(b) It is planned to start work when this application is approved. It will require six months to complete this exploration program.

4. Attached are maps, Exhibits D and E, showing a plan and the location of the proposed exploration work which should locate and determine the economic value of the Heavy Mineral Lenses we estimate will be encountered .

5. A proposed State Road No.10 crosses the entire acreage in a North-South direction. There are no other facilities, buildings, installations and fixtures on the property at this time.

6. In the exploration of these two adjoining properties, additional facilities, buildings or fixtures are to be purchased, installed or erected thereon.

Field Office and Laboratory (none other)	$1,500.00

The drilling, sampling and transportation will be handled by Company owned equipment.

7. (a) It is <u>not planned</u> to rent any operating equipment.

(b) It is <u>not planned</u> to purchase any operating equipment other than listed under (c) Field Office and Laboratory ($1,500.00).

(c) Actual operating maintenance and repairs, based on actual experience, on the equipment furnished by the applicant.

Drill Equipment	Actual Operating Upkeep Based On Past Experience	
2 Drill Rigs and Sampling units complete	$ 8,800.00	
300 feet Sullivan Ex flush couples casing	450.00	
300 feet of 1½ inch double strength Black Pipe	300.00	
Miscellaneous equipment, such as bolts, metal valves, etc.	450.00	
		$10,000.00
Field Office & Laboratory		
Sink Float test laboratory	1,500.00	
Laboratory supplies	200.00	
Total		1,700.00
TOTAL Upkeep and Actual Expense on equipment furnished by the applicant based on actual past experience		$11,700.00

8. Two drills and sampling outfits will be operated two shifts daily and will require the following supervision and labor:

Crew	Hours (Weekly)	Crew (No.)	Rates (Hour)	Salary & Wages (Weekly)	Salary & Wages (6 Months)
Superintendent		1	)	$ 345.00	$ 8,970.00
Foreman		1	)		
Driller(1)	40	4	$1.265	302.40	7,862.40
Driller Helper	40	8	1.10	352.00	9,152.00
Laboratory Technician	40	1	1.265	50.60	1,315.60
Laboratory Helper	40	1	1.10	44.00	1,144.00
Total				$1,094.00	$28,444.00
Plus Compensation Insurance @ 6%				65.64	1,706.64
Total Labor and Supervision				$1,159.64	$30,150.64
Miscellaneous Drill operations, material and supplies and items not included under 7 (c).					5,100.00
GRAND TOTAL					35,250.64

Note: (1) Allowed 25.00 weekly for living expenses. No allowance is made for any wage increases that are not now anticipated.

9. Other material, supplies, engineering, assaying, accounting, power, water, et cetera, are covered in above figures 3.(a).

10. (a) We are prepared to invest $5,322.00 Cash and use our equipment as above provided. This is 10% of the total cash required ($53,220.00).

(b) This amount is sufficient to pay our part of the cost of the project in accordance with the regulations on government participation (Sec. 9 of MO-5) (10% by applicant on Rutile development).

11. Conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions are as follows:

(a) A plant is now operating just four miles north of the properties herein considered.

This plant is handling -

6000 tons daily, averaging

4% Heavy Mineral (8.4% Rutile) and

Producing 20 tons of 94% TiO_2 of Rutile daily.

(b) The land immediately north of the acreage herein considered has commercial Heavy Mineral but its purchase cost would be prohibitive because of surface improvements thereon.

(c) From Map Exhibit E attached, you will note that some drilling has been completed on the north end of this A. C. Skinner property. This work indicates, as shown in this Exhibit E, that actual commercial ore exists on the above property. It indicates an average grade of 3-4% Heavy Mineral of which 5.2% is Rutile.

Based on the experience of the near-by operation, this indicated area should produce 12.48 tons of 94% TiO_2 daily or 4368 tons annually, providing 6000 tons daily of indicated grade and recovery can be maintained.

(d) Ample manpower is available.

(e) You will note that practically all of the equipment is available. Materials and supplies are only needed to keep the present equipment up to standard working conditions and these requirements are comparatively small.

(f) Ample water and power are available.

OPTION AGREEMENT

THIS AGREEMENT, made and entered into this 27th day of November, 1951, by and between A. C. SKINNER (also known as A. Chester Skinner) and VIRGINIA B. SKINNER, his wife, of the County of Duval and State of Florida, hereinafter referred to as "Seller", which term shall include their heirs, legal representatives and assigns wherever the context so requires or admits, and NATIONAL LEAD COMPANY, a corporation, hereinafter referred to as "Purchaser", which term shall include its successors, legal representatives and assigns wherever the context so requires or admits,

W I T N E S S E T H:

That in consideration of the sum of Six Hundred Ninety-One and No/100 Dollars ($691.00) in cash paid by Purchaser to Seller, and in consideration of the other terms and conditions hereinafter expressed, Seller grants to Purchaser an option to purchase, and, in the event such option is exercised as hereinafter provided, agrees to sell and convey to Purchaser by warranty deed the following described property situate in Duval County, Florida, vis: All of the land described in Exhibit A attached hereto and made a part hereof, such land being hereinafter sometimes called or referred to as "optioned land."

This option is granted upon the following terms and conditions:

1. The purchase price shall be the sum of Two Hundred Ninety-Seven Thousand, One Hundred Thirty and No/100 Dollars ($297,130.00) payable as follows:

A. The sum of Six Hundred Ninety-one and No/100 Dollars ($691.00) cash, receipt whereof is hereinabove and hereby acknowledged, said sum to be applied upon the purchase price in the event of the exercise of said option; and if said option is renewed and extended as provided in paragraph 5 hereof, then the sum of Six Hundred Ninety-one and No/100 Dollars ($691.00) paid for and upon such renewal and extension shall (in addition to the $691.00 payment whereof is hereby acknowledged) be applied upon the purchase price in the event of the exercise of the option as renewed and extended; and

B. A further sum in cash, which together with the

EXHIBIT "B"

payment or payments mentioned in the preceding sub-paragraph shall be equal to the entire purchase price of the property as conveyed, upon delivery by Seller to Purchaser of the warranty deed hereinabove mentioned accompanied by the Seller's delivery to the Purchaser of the possession and use of said property.

2. The option herein granted may be exercised by Purchaser at the time and in the manner hereinafter stated, and in the event of such exercise by Purchaser, Seller shall be obligated to deliver to Purchaser the warranty deed hereinabove mentioned, conveying a good and marketable title in fee simple, such title being hereinafter referred to as "merchantable", subject only to taxes for the current year, upon payment of said purchase price, and Seller shall pay for the documentary stamps on such deed, and taxes for the year in which such deed is delivered shall be prorated between the parties as of the date of the delivery of said deed.

Any sales commission incurred or payable by virtue of this Option Agreement shall be paid by the Purchaser.

3. IT IS DISTINCTLY UNDERSTOOD AND AGREED that the Purchaser shall within six months from the date hereof, notify the Seller as to the exercise of the option hereunder and, if it shall exercise this option, then the purchase of said property shall be closed within fifteen (15) days after the Purchaser's receipt of the title binder and survey as hereinafter provided, at the office of the Purchaser's attorneys in Jacksonville, Florida.

The Seller shall, at their expense, within ninety (90) days after Purchaser has notified Seller of its exercise of the option hereby granted it, furnish a binder for title insurance policy issued by either the Title & Trust Company of Florida, the Florida Title & Guaranty Company or The Title Insurance Company of Minnesota, duly qualified to issue such insurance in the State of Florida, in the amount of the purchase price hereinabove set forth, covering all of said optioned land and also a boundary survey of said land, and the Purchaser shall have the

"B2"

period of fifteen (15) days from and after its receipt of such title binder and survey showing "merchantable" title vested in the Seller, free and clear of all exceptions, liens and encumbrances, except taxes for the current year, to examine said title insurance binder and survey and within which to exercise the option herein granted and close said purchase as herein provided.

4. If said insurance binder and survey show that Seller is vested with a merchantable title to all of said property as provided in paragraph 3 hereof, and the Purchaser fails or refuses within the above prescribed period to close said purchase, then Seller shall retain all sums theretofore paid as aforesaid, and all rights, liabilities and obligations of the parties hereunder shall cease and determine. In the event that the title to said property is not so shown to be merchantable as hereinbefore provided, the Purchaser may refuse within said time on that account to close said purchase, and thereupon the Seller shall return to Purchaser all sums theretofore paid Seller by Purchaser hereunder, and this Agreement and all rights, liabilities and obligations of the parties hereunder shall cease and determine. In either of such events the Purchaser shall release in writing all its claim or interest in the optioned land.

5. IT IS EXPRESSLY UNDERSTOOD AND AGREED that the Purchaser may extend or renew the option hereby granted it for the period of six months after the expiration of the six months originally granted by this option, and this option shall be automatically extended or renewed for six months from the date of the expiration of the option originally granted hereunder, upon the payment on or before such original expiration date to the Seller of the sum of Six Hundred Ninety-one and No/100 Dollars ($691.00). Upon the payment of the said sum of Six Hundred Ninety-one and No/100 Dollars ($691.00) in addition to the sum of Six Hundred Ninety-one and No/100 Dollars

"B3"

($691.00) the receipt of which is hereinabove acknowledged, said option and all the terms and provisions thereof shall continue, be renewed and extended for and until the expiration of twelve months from the date of this Agreement, and said sum of Six Hundred Ninety-one and No/100 Dollars ($691.00) shall be applied upon the purchase price in the event of the exercise of the option.

6. The Seller hereby grants to the Purchaser the rights and privilege during the life of this Option, including any extension or renewal thereof, of entering on and upon said property and testing and exploring said land to determine or ascertain the minerals therein by drilling, digging, boring or otherwise, provided that such operations shall be carried on without damage or injury to the optioned land or the timber thereon.

7. If the optioned land shall be purchased by the Purchaser, then after the completion of all its mining operations on said land, the Seller shall be granted two rights of way over the optioned land, each one hundred feet in width and extending East from the right of way of State Road No. 10 (now about to be constructed) to the East boundary line of the optioned land, one such right of way to extend along the South line of Section 12, Twp. 3 South, Range 27 East, and the other right of way to extend along the South line of Section 13, Twp. 3 South, Range 27 East. Such rights of way shall grant the Seller easements for purposes of roads to and from the lands of the Seller. Until the completion of said mining operations as aforesaid and the granting of said two rights of way, the Seller shall have rights of ingress and egress to and from the lands of the Seller over the optioned land lying East of said State Road No. 10, provided that the exercise of such rights of ingress and egress shall not in any manner interfere with or prejudice any mining operations then undertaken or to be undertaken on the optioned land.

In addition to the rights of way and rights of ingress and egress provided in and by the preceding paragraph of this Agreement,

"B"
4

the Seller shall be, and he is hereby, granted a right of way one hundred feet in width extending East from the East line of said State Road No. 10 to the East line of the optioned land along the North line of said Section 12, Twp. 3 South, Range 27 East, for road purposes.

8. All notices given by the Purchaser to the Seller hereunder shall be addressed to Seller at Route 8, Box 105, Jacksonville 7, Florida, and all notices to be given by Seller to Purchaser shall be addressed to 111 Broadway, New York City, New York.

9. This Agreement shall be binding upon and inure to the benefit of all heirs, legal representatives, successors and assigns of the respective parties hereto.

IN WITNESS WHEREOF, Seller and Purchaser have hereunto executed these presents under seal the day and year first above written.

Signed, sealed and delivered in the presence of:

As to Skinners

As to National Lead Company

A. C. Skinner (Seal)

Virginia B. Skinner (Seal)

Seller

NATIONAL LEAD COMPANY

By _____ (Corporate Seal)

Purchaser Its Vice-President

"B5"

STATE OF FLORIDA)

COUNTY OF DUVAL)

This day before me, a Notary Public, personally appeared A. C. SKINNER (also known as A. Chester Skinner) and VIRGINIA B. SKINNER, his wife, both of whom are to me well known, and known to me to be the individuals described in and who executed the foregoing instrument, and acknowledged before me that they executed the same for the uses and purposes therein expressed. And the said VIRGINIA B. SKINNER, well known to me to be the wife of the said A. C. SKINNER (also known as A. Chester Skinner), upon a separate and private examination by me taken and made separately and apart from her said husband, acknowledged to and before me that she executed said instrument freely and voluntarily and without any compulsion, constraint, apprehension or fear of or from her said husband.

WITNESS my hand and official seal this 27 day of November, 1951.

M Earl Anderson

Notary Public in and for the County and State aforesaid: My Commission expires:

Notary Public, State of Florida
My commission expires Apr. 2, 1954.
Bonded by American Surety Co. of N. Y.

STATE OF NEW YORK)

COUNTY OF NEW YORK)

On this day personally appeared before me the undersigned Notary Public, H. S. WILDNER to me well known as ~~the~~ a VICE President of NATIONAL LEAD COMPANY, a New Jersey Corporation, and acknowledged that he as such officer, executed the foregoing instrument as and for the act and deed of said Corporation.

WITNESS my hand and notarial seal at New York New York this 30th day of November, 1951.

John J. Lawlor

Notary Public in and for County and State aforesaid: My Commission expires:

JOHN J. LAWLOR
NOTARY PUBLIC, STATE OF NEW YORK
No. 03-74[illegible]00
Qual. in Bronx Co., Certs. filed with
N. Y. Co. Clerk, Bronx Co., N. Y. Co. Registrar
Term expires March 30, 1952

"B6"

EXHIBIT "A"

LANDS OF A. C. SKINNER

THOSE CERTAIN TRACTS OR PARCELS OF LAND, all being situate in Duval County, Florida, as shown on U. S. Government Survey, and more particularly described as:

Section 11, Township 3 South, Range 27 East.

Section 12, Township 3 South, Range 27 East, except that portion thereof granted as a right-of-way for State Road No. 10.

Section 13, Township 3 South, Range 27 East, except that portion thereof granted as a right-of-way for State Road No. 10.

All of Section 14, Township 3 South, Range 27 East, except the South 1/2 of Government Lot 4.

Consisting of a total of 1,382 acres, more or less.

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OPTION AGREEMENT

THIS AGREEMENT, made and entered into this 26th day of November, 1951, by and between R. G. SKINNER and ANNIE MAE SKINNER, his wife, of the County of Duval and State of Florida, hereinafter referred to as "Seller", which term shall include their heirs, legal representatives and assigns wherever the context so requires or admits, and NATIONAL LEAD COMPANY, a corporation, hereinafter referred to as "Purchaser", which term shall include its successors, legal representatives and assigns wherever the context so requires or admits,

W I T N E S S E T H:

That in consideration of the sum of One Thousand, One Hundred One and 25/100 Dollars ($1,101.25) in cash paid by Purchaser to Seller, and in consideration of the other terms and conditions hereinafter expressed, Seller grants to Purchaser an option to purchase, and, in the event such option is exercised as hereinafter provided, agrees to sell and convey to Purchaser by warranty deed the following described property situate in Duval County, Florida, viz: All of the land described in Exhibit A attached hereto and made a part hereof, such land being hereinafter sometimes called or referred to as "optioned land."

This option is granted upon the following terms and conditions:

1. The purchase price shall be the sum of FOUR HUNDRED FORTY THOUSAND, FIVE HUNDRED DOLLARS ($440,500.00) payable as follows:

A. The sum of One Thousand, One Hundred One and 25/100 Dollars ($1,101.25) cash, receipt whereof is hereinabove and hereby acknowledged, said sum being applied upon the purchase price in the event of the exercise of said option; and if said option is renewed and extended as provided in paragraph 5 hereof, then the sum of One Thousand, One Hundred One and 25/100 Dollars ($1,101.25) paid for and upon such renewal and extension shall (in addition to the $1,101.25 payment whereof is hereby acknowledged) be applied upon the purchase price in the event of the exercise of the option as renewed and extended; and

B. A further sum in cash, which together with the payment or payments mentioned in the preceding sub-paragraph shall be equal to the entire purchase price of the property as conveyed, upon delivery by Seller to Purchaser of the warranty

EXHIBIT "C"

deed hereinabove mentioned accompanied by the Seller's delivery to the Purchaser of the possession and use of said property.

2. The option herein granted may be exercised by Purchaser at the time and in the manner hereinafter stated, and in the event of such exercise by Purchaser, Seller shall be obligated to deliver to Purchaser the warranty deed hereinabove mentioned, conveying a good and marketable title in fee simple, such title being hereinafter referred to as "merchantable", subject only to taxes for the current year and to the turpentine lease hereinafter mentioned, upon payment of said purchase price, and Seller shall pay for the documentary stamps on such deed, and taxes for the year in which such deed is delivered shall be prorated between the parties as of the date of delivery of said deed.

Any sales commission incurred or payable by virtue of this Option Agreement shall be paid by the Purchaser.

3. The Seller shall, at their expense, within ninety (90) days after Purchaser has notified Seller of its exercise of the option hereby granted it, furnish a binder for title insurance policy issued by either the Title & Trust Company of Florida, the Florida Title & Guaranty Company or The Title Insurance Company of Minnesota, duly qualified to issue such insurance in the State of Florida, in the amount of the purchase price hereinabove set forth, covering all of said optioned land and also a boundary survey of said land, and the Purchaser shall have the period of fifteen (15) days from and after its receipt of such title binder and survey showing "merchantable" title vested in the Seller, free and clear of all exceptions, liens and encumbrances, except taxes for the current year and the turpentine lease hereinafter mentioned, to examine said title insurance binder and survey and within which to exercise the option herein granted and close said purchase as herein provided.

"C2"

IT IS DISTINCTLY UNDERSTOOD AND AGREED that the Purchaser shall within six months from the date hereof, notify the Seller as to the exercise of the option hereunder and, if it shall exercise this option, then the purchase of said property shall be closed within fifteen days after the Purchaser's receipt of the title binder and survey as hereinabove provided, at the office of the Purchaser's attorneys in Jacksonville, Florida.

4. If said title insurance binder and survey show that Seller is vested with a merchantable title to all of said property as provided in paragraph 3 hereof, and the Purchaser fails or refuses within the above prescribed period to close said purchase, then Seller shall retain all sums theretofore paid as aforesaid, and all rights, liabilities and obligations of the parties hereunder shall cease and determine. In the event that the title to said property is not so shown to be merchantable as hereinbefore provided, the Purchaser may refuse within said time on that account to close said purchase, and thereupon the Seller shall return to Purchaser all sums theretofore paid Seller by Purchaser hereunder, and this Agreement and all rights, liabilities and obligations of the parties hereunder shall cease and determine. In either of such events the Purchaser shall release in writing all its claim or interest in the optioned land.

5. IT IS EXPRESSLY UNDERSTOOD AND AGREED that the Purchaser may extend or renew the option hereby granted it for the period of six months after the expiration of the six months originally granted by this option, and this option shall be automatically extended or renewed for six months from the date of the expiration of the option originally granted hereunder, upon the payment on or before such original expiration date to the Seller of the sum of One Thousand, One Hundred One and 25/100 Dollars ($1,101.25). Upon the payment of the said sum of One Thousand, One Hundred One and 25/100 Dollars ($1,101.25) in addition to the sum of One Thousand, One Hundred One and 25/100 Dollars ($1,101.25) the receipt of which is hereinabove

acknowledged, said option and all the terms and provisions thereof shall continue, be renewed and extended for and until the expiration of twelve months from the date of this Agreement, and said sum of One Thousand, One Hundred One and 25/100 Dollars ($1,101.25) shall be applied upon the purchase price in the event of the exercise of the option.

6. Merchantable title to be conveyed by the Seller hereunder upon the exercise by the Purchaser of its option hereby granted and the warranty deed to be given by the Seller hereunder shall be subject to a four year turpentine lease dated November 1, 1951, made by Seller to Brinson and Vickers. Said turpentine lease shall specifically provide that the same shall be cancellable by the National Lead Company or its assigns on the following terms of cancellation:

National Lead Company or its assigns may cancel or terminate said turpentine lease as to all or any part of said optioned land after sixty (60) days written notice to said turpentine lessees upon the payment to them of cash at the rate of the number of turpentine cups then on the pine trees on said land as follows:

10 cents per cup during the first year of said lease;

7 cents per cup during the second year of said lease;

~~6~~ 5 cents per cup during the third year of said lease;

~~3~~ 3 cents per cup during the fourth year of said lease;

Change, per Geo. W. Semmes' letter 2/12/61 to Mr. G. M. Wiles

If the Purchaser exercises its option and the Seller prior thereto has received any turpentine products or any sums of money under said turpentine lease, then the balance of the purchase money payable by the Purchaser for the conveyance of said lands hereunder shall be reduced in the aggregate amounts received by the Seller under said turpentine lease from said optioned land prior to their conveyance to the Purchaser, and the Seller shall assign and transfer to the Purchaser all rights and benefits accrued or to accrue under said turpentine lease.

7. The Seller hereby grants to the Purchaser the rights and privilege during the life of this Option, including any extension or renewal thereof, of entering on and upon said property and testing and exploring said land to determine or ascertain the minerals therein by drilling, digging or

"C4"

otherwise, provided that such operations shall be carried on without damage or injury to the optioned land or the timber thereon.

8. If the optioned land shall be purchased by the Purchaser, then after the completion of all its mining operations on said land, the Seller shall be granted three rights of way over the optioned land, each one hundred feet in width, two of them extending East from the right of way of State Road No. 10 (now about to be constructed) to the East boundary line of the optioned land, and the other or third right of way extending West from the right of way of said State Road No. 10 to the West boundary line of the optioned land. The Seller may designate the locations of said three rights of way, provided that each of said rights of way shall run substantially at right angles to said State Road No. 10. Such rights of way shall grant the Seller easements for purposes of roads to and from the lands of the Seller. Until the completion of said mining operations as aforesaid and the granting of said three rights of way, the Seller shall have rights of ingress and egress to and from the lands of the Seller over the optioned land lying East and West respectively, of said State Road No. 10, provided that the exercise of such rights of ingress and egress shall not in any manner interfere with or prejudice any mining operations then undertaken or to be undertaken on the optioned land.

In addition to the rights of way and rights of ingress and egress provided in and by the preceding paragraph of this Agreement, the Seller shall be, and he is hereby, granted a right of way one hundred feet in width extending East from the East line of said State Road No. 10 to the East line of the optioned land along the line dividing Townships 3 and 4 South, Range 27 East, for road purposes.

9. All notices given by the Purchaser to the Seller hereunder shall be addressed to Seller at Route 8, Box 512, Jacksonville 7, Florida, and all notices to be given by Seller to Purchaser shall be addressed to 111 Broadway, New York City, New York.

"C"

10. This Agreement shall be binding upon and inure to the benefit of all heirs, legal representatives, successors, and assigns of the respective parties hereto.

IN WITNESS WHEREOF, Seller and Purchaser have hereunto executed these presents under seal the day and year first above written.

Signed, sealed and delivered in the presence of:

Geo. M. Semmes

Lucas & Lucas

As to R. G. Skinner

R. G. Skinner (Seal)

Annie Mae Skinner (Seal)

Seller

Geo. M. Semmes

Lucas & Lucas

As to Annie Mae Skinner

NATIONAL LEAD COMPANY

By [illegible] (Corporate Seal)

Purchaser Its Vice - President

[illegible] Secretary

[illegible] Asst. Secretary

As to National Lead Company

"6"

STATE OF FLORIDA

COUNTY OF DUVAL

This day before me, a Notary Public, personally appeared R. G. SKINNER, to me well known and well known to me to be the individual described in and who executed the foregoing instrument, and acknowledged before me that he executed the same for the purposes therein expressed.

WITNESS my hand and official seal this 26th day of November, 1951.

Notary Public, State and County aforesaid: My commission expires:

September 23, 1954.

STATE OF FLORIDA

COUNTY OF DUVAL

This day before me a Notary Public, personally appeared ANNIE MAE SKINNER, wife of R. G. SKINNER, to me well known and known to me to be the wife of R. G. SKINNER described in the foregoing instrument, and also known to me to be one of the individuals described in and who executed said instrument, and she acknowledged to and before me that she executed the same for the uses and purposes therein expressed.

And the said ANNIE MAE SKINNER, upon a separate and private examination by me taken and made separately and apart from her said husband, acknowledged to and before me that she executed said instrument freely and voluntarily and without any compulsion, constraint, apprehension or fear of or from her said husband.

WITNESS my hand and official seal this 26th day of November, 1951.

Notary Public, State and County aforesaid: My Commission expires: 9-23-1954

STATE OF NEW YORK

COUNTY OF NEW YORK

On this day personally appeared before me, the undersigned Notary Public H. C. WILDNER to me well known as ~~the~~ a VICE President of NATIONAL LEAD COMPANY, a New Jersey Corporation, and acknowledged that he as such officer, executed the foregoing instrument as and for the act and deed of said Corporation.

Witness my hand and notarial seal at New York, New York this 30th day of November, 1951.

Notary Public, State and County aforesaid: My Commission expires:

JOHN J. LAWLOR
NOTARY PUBLIC, STATE OF NEW YORK
No. 03-7445200
Qual. in Bronx Co., Certs. filed with N. Y. Co. Clerk, Bronx and N. Y. Co. Registrars
Term expires March 30, 1952

"C"

EXHIBIT "A"

LANDS OF R. G. SKINNER AND ANNIE MAE SKINNER

THOSE CERTAIN TRACTS OR PARCELS OF LAND, all being situate in Duval County, Florida, as shown on U. S. Government Survey, and more particularly described as:

Lots 1, 2, 3, and 4, Section 35, Township 3 South, Range 27 East, containing	222 acres, more or less
Fractional Section 36, Township 3 South, Range 27 East, except that portion thereof granted as a right-of-way for State Road No. 10, containing	591 acres, more or less
Lots 3 and 4, and the E 1/2 of the SE 1/4 of Section 26, Township 3 South, Range 27 East, containing	144 1/2 acres, more or less
Section 25, Township 3 South, Range 27 East, except that portion thereof granted as a right-of-way for State Road No. 10, containing	621 acres, more or less
Section 24, Township 3 South, Range 27 East, except that portion thereof granted as a right-of-way for State Road No. 10, containing	624 acres, more or less
Consisting of a total of	2,202 1/2 acres, more or less

2,202,5 acres, more or less, @ $200. per acre = $440,500.

"C8"

ME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
10/13	Alt	500
	Grawe	500
10/13	Talbert	800
10/14	Selfridge	120
		~~110~~
		220
		225

OCT 14 1959

Mr. J. Murray Johnston
Manager
Titanium Alloy Manufacturing Division
National Lead Company
111 Broadway
New York 6, New York

Re: Docket No. DMEA-2286 (Rutile)
National Lead Company
A. C. and R. G. Skinner Tracts
Duval County, Florida
Contract No. Idm-E264

Dear Mr. Johnston:

Thank you for repaying in full the Government's participation of $15,208.85 in your exploration contract for rutile. As a result of this repayment, the Government retains no lien or claim against the property or on any future production.

We appreciate your interest and participation in the DMEA exploration program.

Sincerely yours,

Frank E. Johnson

Acting Director

JWAlt/gla
10-13-59
cc to: Director's Reading File
Operating Committee
J. W. Stamper, USBM
Harold Kirkemo, USGS
OME Field Team, Region V (2)
Docket
Chron

43683

TITANIUM ALLOY MANUFACTURING DIVISION
NATIONAL LEAD COMPANY
111 BROADWAY
NEW YORK 6, N.Y.

OFFICIAL FILE COPY
O. M. E.
RECEIVED OCT 5 1959

DATE	INITIALS	CODE
10/5	C	220
10/6	[illegible]	110
10/7	[illegible]	800
~~10/7~~	~~[illegible]~~	~~500~~
		225

October 2, 1959

Mr. F. E. Johnson, Acting Director
United States Department of the Interior
Office of Minerals Exploration
Washington 25, D. C.

Re: Docket No. DMEA-2286 (Rutile)
National Lead Company
A.C. & R.G. Skinner Tracts
Duval County, Florida
Contract No. Idm-E264

Dear Mr. Johnson:

I regret that no answer has been sent to your letter of August 20th.

We have, however, done the accounting work that is required, and we have instructed our Niagara Falls Plant office to make payment of the $15,208.85 . You will be hearing from them within the next week or ten days.

I believe that payment of this amount and the accounting that will accompany the check, completes the obligations we had under the contract.

Very truly yours,

J. Murray Johnston
Manager

JMJ:avw

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
9/30	Fisher	800
9/30	Talbert	800
"	ALP	500
	Greene	500
10/1	Selfridge	120
		~~110~~
10/2	RCW	220
		225

OCT 1 1959

Mr. J. Murray Johnston, Manager
Titanium Alloys Manufacturing Division
National Lead Company
111 Broadway
New York 6, New York

Re: Docket No. DMEA-2286 (Rutile)
National Lead Company
A. C. & R. G. Skinner Tracts
Duval County, Florida
Contract No. Idm-E264

Dear Mr. Johnston:

Reply has not been received to a letter dated August 20, 1959, wherein the Executive Officer, OME Field Team, Region V, Knoxville, Tennessee, requested payment of royalty and copies of settlement sheets showing the grade and tonnage of ore produced to date from the lands included in the area described in Article 2 of the subject contract. Under provisions of Article 9 of the contract and the certification of discovery or development issued by the Administrator, Defense Minerals Exploration Administration, dated January 21, 1953, the Government is entitled to a royalty on such production during a period of ten years from the date of the contract (May 12, 1952) or until the amount of the Government's contribution to the exploration costs, $15,208.85, has been repaid, whichever occurs first.

This office as successor to the Defense Minerals Exploration Administration is charged with the responsibility of enforcing provisions of contracts entered into by that Administration, including the collection of royalty due under repayment provisions of such contracts. Accordingly, demand is made for an accounting and payment of royalty due to date and for the payment of future royalty as it accrues.

Your early reply to this letter is requested.

CEFisher/ama
September 30, 1959

Sincerely yours,

(signed) FRANK E. JOHNSON

Acting Director

Copy to: Docket
Dir. Read. File
CA & A Division
FT, Reg. V (2)

436

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
ROOM 11 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

September 25, 1959

OFFICIAL FILE COPY
O. M. E.
RECEIVED SEP 28 1959

DATE	INITIALS	CODE
9-28	gad	220
9-28	lat	500
		225

Memorandum

To: Operating Committee, OME - Washington, D. C.

From: OME Field Team, Region V - Knoxville, Tennessee

Subject: DMEA-2286, Idm-E264 (rutile) National Lead Co., New York, N.Y. A. C. & R. G. Skinner tracts, Duval County, Florida

On August 20, we wrote to the Operator, reminding them that royalty is due the Government on the substantial production of heavy minerals from the A. C. Skinner tract. No reply has been received.

We suggest a follow-up letter from Washington.

Robert A. Laurence
Robert A. Laurence
Executive Officer, OME
Region V

V. J. Lynch
V. J. Lynch, Member
Bureau of Mines

WdL/zm
cc:
Opr. Com-2
Lynch-Files

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
ROOM 2-B POST OFFICE BLDG.
KNOXVILLE 2, TENN.

August 20, 1959

OFFICIAL FILE COPY
O. M. E.
RECEIVED AUG 24 1959

DATE	INITIALS	CODE
8/24	gad	VVO
		IVO
8/24		800
8/25	~~alt~~	~~500~~
		22J

Mr. J. Murray Johnston, Mgr.
Titanium Alloys Manufacturing Co.
National Lead Company
111 Broadway
New York 6, New York

Re: DMEA Docket - No. 2286(rutile)
A. C. & R. G. Skinner Tracts
Duval County, Florida
Contract No. Idm-E264

Dear Mr. Johnston:

An inspection of the mining operations of the National Lead Company in Duval County, Florida was made by a member of the Office of Minerals Exploration Field Team on August 17, 1959.

The inspection revealed that mining operations are confined to the A. C. Skinner Tract where dredging was started in October 1958. It was understood that about 14 acres of the R. G. Skinner Tract has been acquired by the Company and will be mined at a later date.

Both the A. C. Skinner and R. G. Skinner Tracts are within the area covered by the above cited exploration contract and of the Certification of Discovery, all minerals produced from either tract is subject to the Government's percentage royalty until the sum of $15,208.85 is repaid or until May 12, 1962. Please refer to Article 9 of the Exploration Contract and to Mr. Mittendorf's letter of January 22, 1953 to Mr. H. C. Wildner.

We will appreciate having your check payable to Office of Minerals Exploration, in payment of royalty due on all ore produced to date supported by settlement sheets showing the grade and tonnage of ore produced todate from lands included in the contract area. Payment of additional royalties, if any, should be made on a monthly basis.

Very truly yours,

EXECUTIVE OFFICER
OME FIELD TEAM
REGION V

DMEA Form 18
Feb. 58

DEFENSE MINERALS EXPLORATION ADMINISTRATION

ANALYSIS OF SEMIANNUAL REPORT OF CERTIFIED PROJECT

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

To: Statistics Branch (Code 210)

From: Division of Minerals - Rutile

Report Period 12-30-58 to 6/30/59

DMEA No.	Operator	Contract No.
2286	National Lead Company	Idm-E 264

ORE ESTIMATES

	Tons	Analysis
DMEA		
Operator to date		
Total		
Production to date		
Ore in ground		

INVESTMENT

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

FACILITIES

Mine Plant		
Mill		
Roads		

REMARKS By Field Team:

The Operator has been mining ore from the A. C. Skinner Tract since October 1958. We never received a report on production and no royalty has been paid. Operator has been requested to pay all royalty due and to submit settlement sheets showing amount and value of production to date.

Operator, dated August 20, 1959 Prepared by J. W. [illegible] Date 9/3/59

31398

OFFICE OF MINERALS EXPLORATION

Semi-Annual Report of Certified project

DMEA-2286, Idm-E264-Rutile

Reporting Period: December 30,1959 to June 30, 1959.

Date Examined(visited): August 17, 1959

Operator: National Lead Company, 111 Broadway, New York 6, N.Y.

Mine Name: A. C. Skinner and R. G. Skinner Tracts

County: Duvall State: Florida . Commodity: Rutile

Docket No. DMEA-2286, Contract No. Idm-E264. Contract Date: May 12,1952

Date Certified: January 21, 1953. Expiration of Royalty Pay't: 5/12/62

Total Amount of Contract: $20,900. Total Expended: $20,278.46

Government Participation at 75%.....$15,208.85

Total Royalty Payments to date.....None

Percent Government Participation repaid: None

Royalty Due on Production to Date: Not known.

Royalty Remarks: The Operator has been mining ore from the A. C. Skinner Tract since October 1958. We have never received a report on production and no royalty on production has been paid. The Operator has been requested to pay all royalty due and to submit settlement sheets showing tonnage and value of production to date.

OFFICIAL FILE COPY
O. M. E.
RECEIVED AUG 31 1959

DATE	INITIALS	CODE
8/31	gad	110
		110
9/1	CEB	800
9/2	~~cet~~	~~500~~
		225

V. J. Lynch, Mining Engineer
U. S. Bureau of Mines

z

DMEA Form 18
Feb. 58

DEFENSE MINERALS EXPLORATION ADMINISTRATION

ANALYSIS OF SEMIANNUAL REPORT OF CERTIFIED PROJECT

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

To: Statistics Branch (Code 210)

Report Period 8/26/57 - 2/3/58

From: Division of Nonmetallic Minerals

DMEA No.	Operator	Contract No.
2286	National Lead Company	Idm-E264

ORE ESTIMATES

DMSA

	Tons		Analysis	$12,870,250
DMEA	Rutile 60,560	Ilmenite 272,570	Rutile ~~@ $100~~	Ilmenite 333,130 ~~@ $25~~
Operator to date				
Total				
Production to date				
Ore in ground	60,560	272,570		

INVESTMENT

Type	Size		Feet	Cost
Shafts				
Winzes				
Drifts and Crosscuts				
Raises				
Drilling Calculated	Type jet		25,000	$75,000
Rehabilitation	Description			

FACILITIES

Mine Plant		
Mill		
Roads		

REMARKS

8/26/57 Will start work in 1958.
2 year reserve at present mining rate (next door).
Erecting mill buildings, and moving spirals 400 of them.

Ask Beck: 1. Cost of clearing land
2. Cost of original drilling
3. Development drilling 500 holes on 100' centers

Prepared by Lawrence G. Houk Date

31398

$15,675	$20,900		$15,208.85		
ANALYSIS:	RUTILE .516%		ILLMENITE 2.32%		
ORE	DMEA	OPERATOR	TOTAL	PRODUCTION	AVAILABLE
	11,739,000 tons		11,739,000		11,739,000
MINERAL					
Rutile	60,560 S.T.		60,560		60,560
Illmenite	272,520 S.T.				272,520

OFFICIAL FILE COPY
O. M. E.
RECEIVED MAR 4 1959

DATE	INITIALS	CODE
3-4	C	220
"	RJ	110
		800
3/5	Hook	600

DMEA EXPLORATION PROJECT

SEMI-ANNUAL REPORT OF CERTIFIED PROJECT

DMEA-2286, Idm-E264(rutile) A. C. & R. G. SKINNER TRACT

Duval County, Florida

Reporting Period: July 1, 1958 to January 1, 1959.

Operator: National Lead Company, A Corporation,
111 Broadway, New York 6, N. Y.

The Knoxville, Tennessee Field Office of the Minerals Industry Division of the Bureau of Mines, informed the writer, the New York Office of the subject Company advised them no production would be made from the Skinner tracts until after January 1, 1959. No inspection of the project for this period will be made for that reason.

Wm. A. Beck, Mining Engineer
Bureau of Mines - OME

March 2, 1959

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UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM 13 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

8/26	C	220
8/27	EEF	800
8/27	RJH	600

August 12, 1958

Mr. J. P. Herndon
State Highway Department
Tallahassee, Florida

2286

Dear Mr. Herndon:

It is my understanding that Humphreys Gold Corporation has applied for permission to move its large dredge from the present location in Duval County to a new site on the Skinner tract in the same county, because of exhaustion of the ore deposit at the present site.

Under the Defense Production Act of 1950, for the purpose of encouraging exploration, development and mining of critical and strategic minerals, the United States Government, acting through the Department of the Interior, Defense Minerals Exploration Administration entered into a contract with the National Lead Corporation of explore for rutile and associated minerals on the Skinner tract. Cost of this exploration was $20,278.46, of which the U. S. Government paid 75 per cent or $14,208.65. This, of course, was in addition to other costs, both before and after the contract, which were borne entirely by the Company.

$15,208.65

The exploration project was successful and on January 21, 1953 a certificate of discovery was issued. To date, there has been no production from these properties, as the Company continued to work its original site a few miles to the north. However, if production is started in the near future, royalties payable to the Government under the terms of the contract, probably will return to the Government its entire contribution of $15,208.65 before January 21, 1963. Reserves are considered ample to last well beyond that date. Humphreys Gold Corporation, operating the Florida properties for National Lead Company has been one of the country's prinipal producers of rutile over the past fifteen years, and will undoubtedly continue

to do so at the new site.

For your information, I enclose a copy of DMEA Order 1, explaining the regulations under which the exploration contract was authorized.

Sincerely yours,

Robert A. Laurence
Executive Officer, DMEA
Field TEam, Region V

RAL/mm
cc
O r. Com-2
Lynch
McKinley
Files

2286

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

Date 1/29/58

Referred to:

1. ~~Mr. McCandless~~
2. ~~Mr. Johnson~~
3. ~~Mr. Chambers~~
4. Docket Control Mails and Files
5. ~~Division~~
6. Docket Control Mails and Files
7. 600

Note comments in report regarding:

1. How about investment data?
2.
3.
4.

and take appropriate action.

- - - - - - - - -

Action taken by Division:

DMEA
2286

Robert E. Adams

RE

RECEIVED JUL 28 1958

DATE	INITIALS	CODE
7-28	C	220
28	COW	100
"	[illegible]	110
	[illegible]	800
		600

DMEA EXPLORATION PROJECT

SEMI-ANNUAL REPORT OF CERTIFIED PROJECT

DMEA-228$, Idm-E264(rutile) A. C. & R. G. SKINNER TRACTS
Duval County, Florida

Reporting Period: January 1, 1958 to July 1, 1958

Operator: National Lead Company, A corporation, 111 Broadway, New York 6, N.Y.

On July 15, 1958 the writer visited the above company and conferred with J. P. Wood, Vice President and Frank M. McKinley, manager of Humphreys Gold Corporation. The Humphreys Corporation is in charge of operations for National Lead Company.

Since the last inspection the Company acquired some additional property adjacent to their operation so extended their production there. The contemplated move to the Skinner tracts is now late in August instead of June as reported in the last interim report. Everything is now in readiness for the move.

The matter of royalty payments to the Government was mentioned to Mr. Wood. He stated that would be taken care of by the New York office of National Lead Company. Any correspondence about royalty should be directed to J. Murray Johnston, Mgr., Titanium Alloy Manufacturing Division, National Lead Company, 111 Broadway, New York 6, New York.

Wm. A. Beck, Mining Engineer
Bureau of Mines (DMEA)

z

July 23, 1958

DEFENSE MINERALS EXPLORATION ADMINISTRATION

SEMI-ANNUAL REPORT OF CERTIFIED PROJECT

DMEA-2286, Idm-E264 (rutile) A. C. & R. G. Skinner Tracts
Duval County, Florida

Reporting Period: July 1, 1957 to January 1, 1958.

Operator: National Lead Company, Inc. 111 Broadway, New York 6, N.Y.

On January 8, 1958 the writer visited the above Company and conferred with Frank M . McKinely, Plant Manager and Jack Elledge, Engineer.

They are still working on the construction of their new plant on the Skinner Tracts. Have completed the construction of the platform for the installation of the spirals and the necessary bins. Only the rougher spirals will be moved to this new location, about 400 of them, while the finishing spirals will remain at the old plant. The plant buildings, office, machine shop, welding shop and oil house have been completed. They are of corrugated iron construction. Two 12-inch wells have been drilled to a depth of 1300 feet to supply water free of salt for use in the spirals. These will supply more than the amount of water needed. Another shallow well has been drilled for drinking water.

It is now anticipated the move to the new location will be made in June. They are figuring on three months to make the move.

Three new trucks capable of carrying 50 tons of concentrates have been purchased. These had to be of special construction to conform with the Florida Highway regulations governing such heavy trucks.

Wm. A. Beck, Mining Engineer
U. S. Bureau of Mines

January 22, 1958

z

DMEA
RECEIVED JAN 29 1958

DATE		
1/29	a b	220
30	Cbm	100
1/30	Hmb	600

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C. 600

December 23, 1952

Memorandum

To: Administrator

From: Nonmetallic Minerals Division

Subject: Review of Docket No. DMEA-2286

Subject: Docket No. DMEA-2286 - Rutile
A. C. Skinner and R. G. Skinner Tracts
National Lead Company
Duval County, Florida
Exploration Project Contract No. Idm-E264 $20,900.00

$28175 57

May 12, 1952	Contract executed in amount of $20,900.00, including $3,439.00 carried over, subject to audit from former Contract Idm-E264.
August 25, 1952	Work completed.
Nov. 6, 1952	Report of Review by Contract Administration and Audit Division, DMEA.
Dec. 23, 1952	Certificate of Discovery written.

L. F. Hearne

L. F. Hearne
Nonmetallic Minerals Division

Report

DMEA-2286 Pueblo
Contract No-E264
National Lead Co

National Lead Co is the lessee of the A. C. Skinner and C. J. Skinner tracts located about two miles southeast of Carbonado in Durango County, Florida, and having an area of 3,365 acres, on which is located a heavy primeval hardwood deposit containing mostly chlorite and pyrite, known as the Skinner's Pasture Prospect. It lies on the southern end of a north-south ridge, flanked by swamps. The average thickness is thirty-five feet. The orebody is some 4,000 feet long north and south with an average width of 1600 feet. It is considered a fair deposit of Pleistocene age formed by constant wave and current action.

The applicant started work on the deposit during Dec 3, 1951 to Feb 18, 1952, stockpiling over over 70,000 tons of ore.

On Feb 2, 1952, a formal MTB contract was signed covering the above drilling, based on a price of $42,499.00. The Government was to pay the grantee for costs incurred from the date of the contract. Ten contract holes were drilled, at a rate of one half mile were to be drilled.

Drew Shannon and Ralph Barnes
Ralph is the one who
drilled the holes
Shannon was a
driller helper

with the holes on each line spaced on 300' centers. The holes were to be drilled thru the ore horizon and not more than 10' into the barren sand beneath it. This drilling was to be called Stage I and comprised about 207 holes, with a total of 11,000 ft. of hole. Stage II was to be undertaken only after completion of Stage I and with the approval of the Government, which approval was dependent on the results of Stage I. It consisted of jet drilling 235 more holes in 12 lines on the same pattern as Stage I, the lines being spaced so as to make them one quarter mile between the lines in Stage I. The total drilling for both stages would have been 23,000 ft. at an estimated cost of $42,449.90

Since

most of the work on the above contract was completed prior to Government participation, and as bulk samples of the ore were needed for metallurgical tests, another contract was signed on May 12, 1952, form ME-200, totaling $20,900.00, of which $3,439.00, subject to audit, was carried over from the old contract, and $17,461.00 was provided for the new work, which consists of excavating four pits,

each approximately 50x50x32, by drag-line, in order to obtain a 100 ton sample for ore-dressing and metallurgical tests, to separate the sample by gravity, dry it, and make electrostatic and electromagnetic separation of the rutile, ilmenite, and zircon fractions, and deliver the rutile to the Operator's plant at Niagara Falls, N.Y. The excavations are also to be used as a source of information for determining future mining methods and costs. The time limit is six months

On May 29, 1952 the Operator submitted form MF-104 showing $3,536.16 of costs claimed during February

On June 25, 1952 a memorandum was sent to the D.M.E.A. Finance Officer, Region VII from the Assistant Chief, Contract Administration and Audit Division, D.M.E.A. recommending, subject to concurrence by D.M.E.A. Executive Officer for Region VII, that $718.59 of the $3,536.16 be disallowed, leaving allowable costs of $2,817.57 in which the Government's 75% participation is $2,113.18

On June 26, 1952, a memorandum was sent to the D.M.E.A. Finance Officer, Region VII, from D.M.E.A. Executive Officer, Region VII, recommending approval of the $2,113.18 voucher for payment.

On June 16, 1952, a memorandum was sent to the Executive Officer, D.M.E.A. Field Team, Region VII, Knoxville, Tenn. from R.V. Spencer, thru J.R. Thorness, Chief, Minerals Tech. Div. Region VII states that four pits have been excavated and 45 to 50 tons of heavy-mineral bearing sand from each pit has been delivered to the Humphreys pilot spiral plant. Bulk samples of the heavy ore, overburden and basement material were also taken for study. Pit "D" has been back-filled and pit "C" is partially back-filled. About half of the bulk samples have been run through the spiral plant. Further separation into various fractions will be done by high tension and induced roll magnetic separators by the Corps of Engineering and Manufacturing Corps., Jacksonville, Fla. These fractions will then be sent to Niagara Falls, N.Y. for further

testimony. It is estimated by Humphreys that the Florida work will be completed by the end of July.

SEMI-ANNUAL REPORT OF CERTIFIED PROJECT

DMEA-2286, Idm-E264- Rutile

A. C. & R. G. Skinner Tracts, Duval County, Florida

Operator: National Lead Company, 111 Broadway, New York 6, N.Y.

The writer called at the subject certified project August 6, 1957, and conferred with Homer Lewis, Supt. and Jack Elledge, Engineer-incharge of construction.

Mr. Lewis stated that they have drilled approximately 500 holes on 100-foot centers to further prove the deposit before they begin operating. The area covered has proven sufficient reserves to last about 2 years at their present rate of production. It is estimated that the entire deposit will last about eight years. This drilling has checked the original exploration work 100 percent. Mr. Lewis also said that the cost of drilling and concentrating the heavies in the samples taken amounted to about $3.00 per foot.

On the new property they are presently erecting buildings and doing other work in preparation to mining the deposit. Mr. Elledge, the engineer on the property, stated that it will be May 1958 before they get into production. He estimated it will take them at least a month to move and erect the Humphrey Spirals after they deplete their present deposit.

The new plant is being erected on a high elevation on the extreme north end of the A. C. Skinner Tract. Mining will be started on the southern end of the deposit.

Wm. A. Beck, Mining Engineer
Bureau of Mines

Inspected: Aug.6, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED AUG 28 1957

DATE	INITIALS	CODE
8/26	Conn	100

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ACTION ON INTER[illegible]
[illegible] FINAL FIELD [illegible] REPORT
Date 3/12

Referred to:

1. ~~Mr. Mistendorf~~
2. ~~Mr. Jenkins~~
3. ~~Mrs. [illegible]~~
4. Docket Control Mails and Files
5. Division
6. Docket Control Mails and Files

Note comments in report regarding:

1. Indicates some activity
2.
3.
4.

and take appropriate action.

Action taken by Division

Robert F. Adams

SEMI-ANNUAL REPORT OF CERTIFIED PROJECT
On

DMEA-2286, Idm-E264 (rutile)

A. C. & R. G. Skinner Tracts, Duval County, Florida

Operator: National Lead Company, A corporation
111 Broadway, New York 6, N.Y.

The writer called at the subject certified project February 28, 1957. Production has not commenced, however, the clearing of the timber from the land is progressing. Mr. Homer Lewis, Supt., with whom the writer conferred and who accompanied the writer to the property, stated that they are presently delimiting the ore body by drilling on 100-foot centers. He expected that it would be about a year before they start erecting a plant on the property.

Present plans are to move theirHumphrey Spirals to the site and do the separating of the various minerals at their present plant.

Visited: Feb. 28, 1957

OFFICIAL FILE COPY
D M E A
RECEIVED MAR 11 1957

DATE	INITIALS	CODE
3/12	C	220
13	COM	100

Wm. A. Beck, Mining Engineer
U. S. Bureau of Mines (DMEA)

z

RECEIVED
MAR - 8 1956

SEMI-ANNUAL REPORT OF CERTIFIED PROJECT

Reporting Period: July 1, 1955 - December 31, 1955. Date of Exam: 2-10-56

Property Name : A. C. and R. G. Skinner Tracts

County and Stage: Duval County, Florida

Docket No. and Commodity: DMEA-2286 - Rutile

Contract No.: Idm-E264

Date of Contract: May 12, 1952

Date of Certification: January 21, 1953

Expiration date of Royalty Payments: May 12, 1962

Total Amount of Contract: $20,900.00

Total Expenditures under Contract: $20,278.46

Amount of Government Participation: $15,208.85

Royalty Payments this Period: None

Previous Royalty Payments: None

Total Royalty Payments to Date: None

Percent Government Participation Repaid: 0.00%

Royalty due on Production to Date: None

Royalty Remarks: There has been no production from the property so no royalty id due.

Original Estimate of Reserves (from final Engineer and Geological Report): There are in the area explored 11,739,000 tons of ore from which can be recovered by standard practice 60,560 tons of rutile of 93.4% TiO_2 and 272,520 tons of ilmenite of 62% TiO_2.

Other Remarks:

The writer conferred with the following Humphreys Gold Corporation personnel who are operating for National Lead Company: J. P. Wood, Vice-president and General Manager; Frank M. McKinley, Plant Manager and Homer Lewis, Superintendent.

The Company is now operating on a tract west of the new U. S. Highway No. 1A, and are pumping their ore to the old concentrating plant. The tails are then pumped back to the mined area. It is expected that this deposit will be depleted in about two years and three months from date.

Upon depletion, production of the Skinner tracts will begin. In the meantime some additional drilling will be done to further develop the properties.

They are presently clearing the timber off the property. They have found that by cutting the timber some time in advance of mining that the roots will rot and will make the dredging of the sands much easier.

Wm. A. Beck, Mining Engineer
U. S. Bureau of Mines

February 2, 1956.

Z

Docket Copy
Surname:

Houk
Ellis
Johnson
Matteucci

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C. 600

FEB - 1 1956

Mr. Hobart S. Cooper
Room 4731, General Accounting
Office Building
Office of Defense Mobilization
Washington 25, D. C.

Dear Mr. Cooper:

Reference is made to your recent oral request for information on the inferred reserves of rutile as a result of the DMEA exploration work. The following information is confidential for Government use only and not for public disclosure.

DMEA has received six applications for rutile exploration under the DMEA program. Four from Florida in Duvall, St. Johns, Brevard and Indian River, Sarasota and Charlotte Counties. One from Kings County, California, and one from Calvert County, Maryland. Four applications were denied, one withdrawn, and one contract, National Lead Company, DMEA-2286, was written. One certification of discovery or development for rutile, DMEA-2286, National Lead Company, and one certification in which rutile is a co-product, DMEA-2576, Marine Minerals, Inc., have been issued by DMEA.

National Lead Company
DMEA-2286, Contract No. Idm-2264

The work by National Lead Company, and in participation with DMEA outlined an estimated, inferred reserve of 60,560 short tons of rutile and 272,520 short tons of ilmenite and the project was certified. The company is reported to plan initial operations in approximately three years at this property located in Duvall County, Florida, six miles southeast of Jacksonville. No reserves of zirconium have been calculated in this case, but zircon content may approximate two parts zirconium to one part rutile.

Marine Minerals, Inc.
DMEA-2576, Contract No. Idm-2392

Rutile, and possibly zircon, is reported as being produced from this operation in Aiken County near the City of Aiken in South Carolina. This deposit is estimated to contain approximately 23,834 tons of rutile, 14,300 tons of monazite, 40520 tons of zirconium, and 60,780 short tons of ilmenite.

Sincerely yours,

Lawrence G. Houk, Chief
Nonmetallic Minerals Division

LGHouk:gad 1/31/56

Copy to: Admr. R. File
Docket (2)
Field Team, Region V
Mr. Ellis
Mr. Houk

R.C.S.

See rutile file for letter on reserve supply to ODM dated February 1, 1956.
(Mr. Hobart S. Cooper, ODM)

C

REPORT OF INSPECTION OF CERTIFIED PROJECT

DMEA-2286, Idm-~~E262~~ 264 (rutile)

SKINNER TRACTS, Duval County, Florida

Operator: National Lead Company, a Corporation, 111 Broadway, New York 6, N.Y.

The writer called at the subject project on April 27, 1955, and taked with Mr. J. P. Wood, Gen'l Mgr., Frank M. McKinley, plant manager and Homer Lewis, Supt. These men are Humphreys Gold Corporation employees. This corporation is in charge of the National Lead Company's operation in Florida. No work has been done on the project to date. It is expected that their present deposit will be depleted in September. They will then move their dredge across New Highway U. S. No. 1A, pump their material to their present concentrating plant and pump the tails back for fill. It is expected that this deposit will last 30 months. Upon its depletion they expect to move to the Skinner Tracts.

Inspected: April 27, 1955

Wm. A. Beck, Mining Engineer
U. S. Bureau of Mines

DEPARTMENT OF THE INTERIOR
Bureau of Mines Minerals Administration
RECEIVED
DEC 16 1954

REPORT OF INSPECTION OF CERTIFIEDLPROJECT

DMEA-2286, Idm-E 264 (rutile)

SKINNER TRACTS, Duval County, Florida

Operator: National Lead Company, a Corporation, 111 Broadway, New York 6, N. Y.

The writer called at the subject project on December 7, 1954, and talked with Mr. J. P. Wood, Manager, and Homer Lewis, Superintendent of the Humphreys Gold Corp., this corporation is in charge of the National Lead Company's operation in Florida. No work has been done on the project to date. Nothing definite could be given on the starting of operations on the Skinner Tracts. Upon depletion of their present deposit they plan to move their dredge across the new highway No. 1A, and pump from there. This deposit has about two years reserves.

The project site was visited to verify the above statements.

December 7, 1954.

Wm. A. Beck, Supervising Mining Engineer
U. S. Bureau of Mines

z

REPORT OF INSPECTION ON CERTIFIED PROJECT

DMEA-2286, Idm-E 264 (rutile)

NATIONAL LEAD COMPANY, a Corporation
111 Broadway, New York 6, N. Y.

SKINNER TRACTS, Duval County, Florida

The writer called at the subject project on June 24, 1954. No production has been made from the deposit to this date.

Mr. F. L. Jackson, Comptroller for the Humphreys Gold Corp., which corporation is in charge of the National Lead Company's operation in Florida was contacted. He stated that as far as he knew the company did not plan to start operations on the Skinner Tracts until they depleted their reserves on their present site. This may take a couple of years. He did state, however, that National Lead is contemplating an expansion program and may start operations there sooner.

June 25, 1954.

Wm. A. Beck

Wm. A. Beck, Mining Engineer
U. S. Bureau of Mines, Region VII

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

SEMI-ANNUAL REPORT OF CERTIFIED PROJECT

Period: July 1, 1953 to December 31, 1953

Docket No.: DMEA-2286 Contract: Idm-E 264

Commodity: Rutile

Operators Name: National Lead Company

Address: 111 Broadway, New York 6, N.Y.

Name of Mine: Skinner Tracts

County: Duvall State: Florida

Date Certified: January 21, 1953

Contract Amount: $20,900.00 Amount Spent: $20,278.46

Government's Participation: 75% or $15,208.85 (or May 12, 1962)

Remarks: No production has been made from this property. Present plans are to start erection of a plant about January 1955.

Report Prepared by: Wm. A. Beck, Mining Engineer
U. S. Bureau of Mines

February 1, 1954

zm

REPORT OF INSPECTION OF CERTIFIED PROJECT

DMEA-2286, Idm-E 264 (Rutile)

National Lead Company, a corporation, 111 Broadway,
New York 6, N. Y.

SKINNER TRACTS, Duvall County, Florida

The writer called at the subject project on January 13, 1954. No production has been made from the deposit to thisdate.

Mr. J. P. Wood of Humphreys Gold Corporation, who is in charge of the National Lead Company's operation in Florida was contacted. He stated that it may be January 1955 before they start construction of a plant on the Skinner tracts. They have two or three years to go before they deplete the deposit they are now working.

Accompanied by Homer Lewis, the plant superintendent, the property where the exploration work was done was visited.

January 13, 1954

Wm. A. Beck, Mining Engineer
U. S. Bureau of Mines, Region VII

z

UNITED STATES

DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

SEMI-ANNUAL REPORT OF CERTIFIED PROJECT

Period: January 1, 1953 to June 30, 1953

Docket No. DMEA-2286. Contract : Icm-E264. Commodity: Rutile

Operator's Name: National Lead Company

Address: 111 Broadway, New York 6, N.Y.

Name of Mine: Skinner Tract. County: Duvall State: Florida

Date Certified: January 21, 1953. Contract Amount: $20,900.00

Amount Spent: $20,278.46. Government's percentage Royalty 75% or $15,208.85 (or May 12, 1962)

Remark:

No production has been made from this tract. Operator does not plan to get into production on this deposit for several years unless something unforeseen happens.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM 13, POST OFFICE BLDG.
WASHINGTON 25, D. C.
KNOXVILLE 2, TENN.

June 5, 1953 Noted - Com

REPORT OF INSPECTION on CERTIFIED PROJECT

NATIONAL LEAD COMPANY- DMEA-2286, Idm-E264
(Rutile)

Skinner Tracts, Duvall County, Florida

The writer called at the subject project on June 3, 1953.

No production has been made from the deposit to this date.

Mr. J. P. Wood of Humphreys Gold Corporation who is in charge of the National Lead Company's operation in Florida was contacted. He stated that they had no plans for starting operations on the Skinner Tracts in the immediate future.

W A Beck

Wm. A. Beck, Mining Engineer
U. S. Bureau of Mines

FILE COPY
SURNAME:

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C. 630

Houk
Selfridge

FEB 11 1953

Mr. Robert L. Lawrence
Executive Officer, DMEA
Field Team, Region VII
Room 13, Post Office Bldg.
Knoxville 2, Tennessee

Subject: Docket No. DMEA-2236 - Rutile
National Lead Company
Duval County, Florida
A. C. and R. G. Skinner Tracts
Contract No. Idm-2264

Dear Mr. Lawrence:

Reference is made to your memorandum of February 3, 1953, to the Operating Committee, on the subject contract, and our letter to Mr. Jess Larson, Administrator, Defense Materials Procurement Agency, on the certification of discovery.

The four copies of the final field team report have been received in this office and one copy has been forwarded to the Defense Materials Procurement Agency for their information and files. We regret the omission on our part and thank you for bringing this matter to our attention.

Sincerely yours,

George E. Selfridge (HB)
Chairman, Operating Committee

Approved:

W. H. Hedges (HB)
Member, Bureau of Mines

D. M. Lemmon (HB)
Member, Geological Survey

J.H.
2-11-53

LGHouk:gad 2/9/53
Copy to: Admr. R. File
Operating Committee
Docket File
Mr. Houk

FILE COPY
SURNAME:

Houk

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C. 600

FEB 10 1953

Mr. H. I. Young, Deputy Administrator
Defense Materials Procurement Agency
General Services Administration
Building
Washington 25, D. C.

Subject: Docket No. DMEA-2286 Rutile
National Lead Company
Duval County, Florida
A.C. and R.G. Skinner Tracts
Exploration Project Contract
No. Idm-E264

Dear Mr. Young:

Reference is made to our letter of January 22, 1953, concerning the Certification of Discovery of National Lead Company's Contract for exploration assistance in Duval County, Florida.

Transmitted herewith is final field team report which accepts the quantities and quality of the ore as shown in the National Lead Company's final report. J.C. 2/10/53

The Washington Office of the Defense Minerals Exploration Administration concurs with the field team, and accepts the Operator's final report and ore reserve estimates of the National Lead Company.

Sincerely yours,

C. O. Mittendorf (fw)

Administrator

Enclosure

LGHouk:gad 2/9/53
Copy to: Admr. R. File
Operating Committee
Mr. Selfridge
Mr. Thayer, 5216 GSA Bldg.
Mr. Murkland
Field Team, Region VII
Mr. Hedges, 4604
Docket File
Mr. Houk

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.
ROOM 13, POST OFFICE BLDG.
KNOXVILLE 2, TENN.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 5 1953

February 3, 1953

Memorandum

To: Operating Committee, DMEA - Washington

From: Executive Officer - D M E A - Region 7 - Knoxville, Tennessee

Subject: Final Report, DMEA-2286, Idm-E264. National Lead Co. (Rutile)

In Mr. Mittendorf's letter of January 22, 1953, to Jess Larson, which accompanies the certificate of discovery on the subject exploration contract, there is the following statement:

"When the Government's final field report is received by this office, a copy will be sent you, together with our evaluation of the results indicated by the project."

Four copies of the Final Field Report on this project were mailed to you on November 12, 1952. If they have not been received, please advise me, and we will send new copies.

Robert A. Laurence

Robert A. Laurence

C O P Y

C O P Y

TITANIUM ALLOY MANUFACTURING DIVISION
National Lead Company
111 Broadway
New York, N.Y.

January 30, 1953

Mr. Robert A. Laurence, Executive Officer,
Defense Minerals Exploration Administration
Field Team, Region VII,
Room 13-Post Office Building
Knoxville 2, Tennessee

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
1953

Subject: Docket No. DMEA-2286 - Rutile
A. C. Skinner and R.G. Skinner Tracts
National Lead Company,
Duval County Florida
Exploration Project Contract No. Idm-E264
$20,900.-

Dear Sir:

We have a letter of January 22nd from Mr. C. O. Mittendorf, Administrator DMEA, addressed to Mr. H. C. Wildner, on the above subject.

I write to advise you that we do not contemplate any early start of mining operations on the Skinner Properties, and that we will advise you six months prior to the time that we do expect to begin operations there.

Very truly yours,

s/
J. Murray Johnston
Manager

copied by zm.
2-5-53
cc:
Norris
Opr. Com.
Files

FILE COPY
SURNAME:

Selfridge
Thayer
Hedges

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

JAN 22 1953

Mr. Jess Larson, Administrator
Defense Materials Procurement Agency
General Services Administration
Building
Washington 25, D. C.

Re: Docket No. DMEA 2286-Rutile
National Lead Company
A.C. and R.G. Skinner Tracts
Duval County, Florida
Exploration Project Contract Idm-1264

Dear Mr. Larson:

Enclosed herewith is a copy of a "Certification of Discovery or Development" pertaining to the above-referenced property.

An original contract in the amount of $42,449.90, which was signed February 4, 1952, the day that approval was received to add rutile to the list of critical minerals, provided for the jet drilling of a buried heavy-mineral beach deposit. Because work on the project had been started prior to making application for exploration aid and because the jet drilling had advanced more rapidly than anticipated, the Government participated only in the final part of the drilling program. Its share of expenditure amounted to $2,113.18.

J. C. 1/22/53

The contract was rewritten and signed on May 1[illegible], 195[illegible] in the amount of $20,900.00 which provided for that part of the drilling program in which the Government had previously participated and for the excavation of four pits to check sample and to secure bulk samples for concentrating tests. Work under the contract was completed with an expenditure of $20,278.46 (Government participation 75 percent or $15,208.85) as shown by the final audit certificate.

The Operator's final report states:

"This pit sampling and additional drill sampling established the accuracy of the drill sampling previously done by National Lead Company. Based on the above there are in this area 11,739,000 tons of ore from which can be recovered by standard practice 60,500 tons of rutile of 93.4% TiO_2 and 272,520 tons of ilmenite of 62% TiO_2."

When the Government's final field report is received by this office, a copy will be sent you together with our evaluation of the results indicated by the project.

Sincerely yours,
C. O. Mittendorf (fw)
Administrator

LGHoukEfls 1/15/53
GCSelfridge:pa 1/21/53
Copy to: Admr. R. File
Operating Committee
Mr. F. E. Johnson
Mr. Thayer, 5216 GSA Bldg.
Field Team, Region VII (2)
Mr. Murkland, 6020
Mr. Houk
Docket File
Mr. Hedges, 4604

Enclosure

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C. 600

Mr. Jess Larson, Administrator
Defense Materials Procurement Agency
General Services Administration
Building
Washington 25, D. C.

Subject: Docket No. DMEA-2286 - Rutile
A.C. Skinner and R.G. Skinner Tracts
National Lead Company
Duval County, Florida
Exploration Project Contract
No. Idm-E264 $20,900

Dear Mr. Larson:

I am enclosing a copy of a "Certification of Discovery or Development", on the above-referred property.

The project contract was signed May 12, 1952, the Government participating to the extent of 75% in an exploration project estimated to cost $20,900.00. On completion of the contract, August 26, 1952, the Government's share amounted to $15,208.85, according to final audit certificate.

The ore body was outlined by a jet drilling program in which the Government participated $2,113.18. National Lead had completed most of the work outlined in the contract prior to the date of signature. An ammended contract was prepared to sample and metallurgically test the ore body. The Operator's final report states:

"This pit sampling and additional drill sampling established the accuracy of the drill sampling previously done by National Lead Company. Based on the above there are in this area 11,739,000 tons of ore from which can be recovered by standard practice 60,560 tons of rutile of 93.4% TiO_2 and 272,520 tons of ilmenite of 62% TiO_2."

When the final field report is received by this office, this information together with our evaluation of the project will be forwarded.

Sincerely yours,

C. O. Mittendorf

Administrator

Enclosure

This letter was rewritten at the request of the Operating committee and after conferring with Mr. Houk who gave his permission to do so. He also asked that a copy of this letter be left in the docket.

G. Selfridge

FILE COPY
SURNAME:

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C. 600

Hearne
Hook
Agan
Hoffmuel
Chandler
Mayer
Hedges
Selfridge

JAN 22 1953

Mr. H. C. Wildner
Vice-President
National Lead Company
111 Broadway
New York 6, New York

Subject: Docket No. [illegible]
A. C. Skinner and R. C. Skinner
Tracts
National Lead Company
Duval County, Florida
Exploration Project Contract
No. Idm-2264 $20,000.00

Dear Mr. Wildner:

Transmitted herewith is Certification of Discovery or Development under Contract No. Idm-2264 on the A. C. Skinner and R. C. Skinner tracts.

By the terms of the Exploration Project Contract and of the Certification, all ore produced from the aforesaid tracts from the date of the Exploration Project Contract Idm-2264 is subject to the Government's percentage royalty as set forth in the contract until the sum of $15,208.85 is paid or until May 12, 1962, whichever occurs first.

Payments should be made to Mr. Robert A. Lawrence, Executive Officer, Defense Minerals Exploration Administration, Field Team, Region VII, Room 13, Post Office Building, Knoxville 2, Tennessee. 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 quality and grade of the ore sold, the name of the purchaser, and the price and charges certified to be correct by the purchaser.

You are requested to notify Mr. Lawrence 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. Lawrence at six-month intervals that no production has been made.

Sincerely yours,

J. C. 1/22/53

C. O. Mittendorf (for)

Administrator

Copy to: Docket File
Admr. R. File
Operating Committee
Mr. F. R. Johnson
Mr. Hedges, 4604
Mr. Thayer, 5216 GSA Bldg.
Enclosure
LFHearne:gnd 12/23/52

Field Team, Region VII
Mr. Chambers, 2612

Mr. Hook

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~
Room 13, Post Office Building
Knoxville 2, Tennessee

COPY COPY

November 12, 1952

Memorandum

To: Operating Committee, DMEA - Washington

From: Field Team, DMEA - Region 7

Subject: DMEA-2286, Idm-E264. National Lead Co. (Rutile)
Final Report of Field Team

Enclosed herewith are 4 copies of the Field Team's final report on the subject contract. Certification, based on Operator's reserve figures, is recommended.

/s/ Robert A. Laurence
Robert A. Laurence
DMEA Field Team, Region 7

/s/ Wm. A. Beck
Wm. A. Beck, for V. J. Lynch
U. S. Bureau of Mines

COPY COPY

FINAL REPORT
on
DMEA-2286, Idm-E264, National Lead Company
(Rutile)
111 Broadway, New York 6, New York

A. G. Skinner Tract, Secs. 12, 13, 24, T3S,R27E
Duval County, Florida

Property is approximately 9 miles southeast of Jacksonville, Florida and approxmiately 4 miles south of Operator's mine and plant.

Work consisted of bulk sampling, and concentration tests. Operator's report shows reserves of 11,739,000 tons of ore, from which 60,560 tons of rutile (93.4% TiO_2) and 272,520 tons of ilmenite (62% TiO_2) can be consnetrated. No check samples or assays have been made, and Operator's figures are considered acceptable.

Recommendations: Discovery should be certified, based upon above figures and area outlined in green on large map accompanying Operator's final report. No further exploratory work is warranted. Productions is economically feasible. See Operator's letter of October 20, 1952.

Work began May 12, 1952, completed October 23, 1952. For description of work, see Operator's report.

No additional data to add to Operator's report.

Expenditures:

Total Authorized	$20,900.00
Total Approved Cost of Proj.	20,278.46
Gov'ts Share of Cost	15,208.85
Gov'ts Share Unexpended	466.15

Production during Operations: None

Operations carried out efficiently. Operator is competent.

No equipment purchased for joint account of Operator and Government.

Robert A. Laurence, USGS

Wm. A. Beck, USBM

zm

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~
Room 13, Post Office Building
Knoxville, Tennessee

COPY November 10, 1952 COPY

Mr. Sam J. Wardell, Finance Officer
U. S. Bureau of Mines
Morris, Tennessee

Re: DMEA-2286, Idm-E264
National Lead Co. (Rutile)

Dear Mr. Wardell:

We have today received Report of Review for the subject contract from Mr. Talbert.

Work on this project was carried out under the provisions of the contract and accomplished the objectives of the contract. There was no equipment purchased for the joint account of the Government and the Operator.

Sincerely yours,

Robert A. Laurence
Exeuctive Officer, DMEA
Region VII

RAL/zm
cc:
Beck
Lynch
Talbert
Opr. Com
Files

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 14 1952

Room 13, Post Office Building
Knoxville 2, Tennessee

November 12, 1952

Memorandum

To: Operating Committee, DMEA - Washington

From: Field Team, DMEA - Region 7

Subject: DMEA-2286, Idm-E264. National Lead Co. (Rutile)
Final Report of Field Team.

Enclosed herewith are 4 copies of the Field Team's final report on the subject contract. Certification, based on Operator's reserve figures, is recommended.

Robert A. Laurence

Robert A. Laurence, Executive Officer
DMEA Field Team, Region 7

W. A. Beck

Wm. A. Beck, for V. J. Lynch
U. S. Bureau of Mines

case 11-21

Reviewed by
DMEA OPERATING COMMITTEE

11-19-52
(date)

Field Team Final Rept.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 1 4 1952
DOCKET COPY

gd
1/18/54

FINAL REPORT
on
DMEA-2286, Idm-E264. National Lead Company
(Rutile)
111 Broadway, New York 6, New York

A. G. Skinner Tract, Secs. 12, 13, 24, T3S,R27E
Duval County, Florida

Property is approximately 9 miles southeast of Jacksonville, Florida and approximately 4 miles south of Operator's mine and plant.

Work consisted of bulk sampling, and concentration tests. Operator's report shows reserves of 11,739,000 tons of ore, from which 60,560 tons of rutile (93.4% TiO_2) and 272,520 tons of ilmenite (62% TiO_2) can be concentrated. No check samples or assays have been made, and Operator's figures are considered acceptable.

Recommendations: Discovery should be certified, based upon above figures and area outlined in green on large map accompanying Operator's final report. No further exploratory work is warranted. Production is economically feasible. See Operator's letter of October 20, 1952.

Work began May 12, 1952, completed October 23, 1952. For description of work, see Operator's report.

No additional data to add to Operator's report.

Expenditures:

Total Authorized	$20,900.00
Total Approved Cost of Proj.	20,278.46
Gov'ts Share of Cost	15,208.85
Gov'ts Share Unexpended	466.15

Production during Operations: None

Operations carried out efficiently. Operator is competent.

No equipment purchased for joint account of Operator and Government.

Robert A. Laurence, USGS

Wm. A. Beck, USBM

Reviewed by
DMEA OPERATING COMMITTEE

11-19-52
(date)

zm

FILE COPY
SURNAME:
DOCKET COPY

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Room 13, Post Office Building
Knoxville, Tennessee

November 10, 1952

Mr. Sam J. Wardell, Finance Officer
U. S. Bureau of Mines
Morris, Tennessee

Re: DMEA-2286, Idm-E264
National Lead Co. (Rutile)

Dear Mr. Wardell:

We have today received Report of Review for the subject contract from Mr. Talbert.

Work on this project was carried out under the provisions of the contract and accomplished the objectives of the contract. There was no equipment purchased for the joint account of the Government and the Operator.

Sincerely yours,

Robert A. Laurence
Executive Officer, DMEA
Region VII

RAL/zm
cc:
Beck
Lynch
Talbert
Opr. Com.
Files

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 12 1952

FILE COPY
SURNAME:
800
Talbert

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

NOV 7 1952

Mr. Sam J. Wardell
DMEA Finance Officer
Bureau of Mines
P. O. Box 217
Norris, Tennessee

Re: Docket DMEA-2286
Contract Ida-3264
National Lead Company

Dear Mr. Wardell:

As requested by your memorandum of October 31, 1952, the final MF-104 submitted for the referenced contract has been reviewed and a Report of Review prepared. The original and one copy of the Report of Review, together with all papers forwarded with your letter, are enclosed.

Your attention is called to the last paragraph of the Report of Review. Since the final report of Field Team has not been received and I have not verified the satisfactory performance of the work by personal contact with the Executive Officer or the examining engineer a definite statement that the work has been completed satisfactorily should be obtained from Mr. Laurence. Also, since Exhibit "A" of the contract provides that "the allowable costs of the project **** will be the payments made by the Operator to the independent contractor, plus the amount carried over ***** (underscoring supplied), it will be necessary to have the Operator either certify on the invoice that payment has been made to the sub-contractor or present evidence of such payment in the form of a copy of the paid invoice or a photostat of the canceled check.

The red penciled checks and figures on the sub-contractor's invoices were made by me during my review. It will be noted there are several errors, the aggregate of which favors the sub-contractor. However, since the contract would allow payment of only a few cents more, these may be disregarded.

The face of the MF-104 indicates that payment has been received for the work done under the first contract. No copy of the MF-104 was received by this office. If payment was made please forward a copy to us.

Best regards,

(Signed) E. D. Talbert

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

EDTalbert/wb
November 6, 1952

Enclosure

Copy to: Docket, Admr. Reading File, Mr. Laurence, Mr. Talbert

F.H. 11-7-52

FILE COPY
SURNAME:
800
Talbert

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

NOV 7 1952

Mr. Robert A. Laurence
Executive Officer
DMEA Field Team, Region VII
Room 13, Post Office Building
Knoxville 01, Tennessee

Re: Docket DMEA-2286
Contract Idm-E-264
National Lead Company

Dear Mr. Laurence:

In accordance with a request from Mr. Wardell the final MF-104 on the referenced contract has been reviewed and a Report of Review prepared. One copy of the Report of Review, together with a copy of my letter of this date to Mr. Wardell is enclosed for your files.

Since the Field Team's final report has not been received and I have not personally ascertained from you or Mr. Beck that the work was completed satisfactorily, it would be appreciated if you would address a memorandum to Mr. Wardell, with copy to this Division, advising of your acceptance of the work.

Mr. Chambers had this project on his list of reviews to be made during his contemplated visit to Knoxville and Morris. Please advise him that the review has been made.

Sincerely yours,

(Signed) E. D. Talbert

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

S.H. 11-7-52

Enclosure

EDTalbert/wb
November 6, 1952

Copy to: Docket
Admr. Reading File
Mr. Wardell
Mr. Chambers

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

Room 13, Post Office Building
Knoxville 2, Tennessee

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 31 1952

October 29, 1952

Memorandum

To: Operating Committee, DMEA - Washington

From: Executive Officer, DMEA - Region 7

Subject: DMEA-2286, Idm-E264, National Lead Co. (Rutile)
Final Report; Skinner Property, Duval County, Fla.

Enclosed herewith are 4 copies of the Operator's Final Geological and Engineering report on the subject exploration project. Operator's final MF-104 and MF-104A have been sent to the Regional Finance Office.

Field Team final report will be submitted after the project has been audited and final payment has been approved. However, as this project consisted almost entirely of laboratory and pilot plant tests on bulk samples, with no independent check tests or assays in Government plants, there is little additional information to put in the Field Team report. Progress on the bulk sampling was adequately described in an interim report by R. V. Spencer, formerly of the Bureau of Mines, dated June 16, 1952. It is of interest to note that the Carpco consulting report included in the Operator's report was prepared by Mr. Spencer.

Robert A. Laurence

Robert A. Laurence

Case 10-31

Operator's Final Rpt

Docket No. DMEA 2286
Operator National Lead Company
111 Broadway
New York 6, N. Y.

GEOLOGICAL AND ENGINEERING REPORT

1. Humphreys Gold Corporation report of August 27, 1952 titled SKINNER PIT SAMPLING PROJECT.

2. Humphreys Gold Corporation report titled OUTLINE OF PILOT SPIRAL AND DRY MILL TREATMENT OF SKINNER ORE.

3. Carpco Engineering and Manufacturing report on A. C. SKINNER TRACT BULK SAMPLES.

4. Map showing outline of orebody as determined by drilling.

5. Pencil sketches (Four in all) of Test Pits # 1, # 2, # 3, # 4.

6. Titanium Alloy Manufacturing Division statement of October 20, 1952 relative to probability of Mining the Skinner Tract.

Please Return to
DMEA. Nonmetallic
Minerals Division
Room 4637 Interior.

August 27, 1952

HUMPHREYS GOLD CORPORATION

SKINNER PIT SAMPLING PROJECT

The area known as the Skinner Tract lies in Sections 12, 13, 24, 25, and 36, Township 3 South, Range 27 East, Duval County, Florida. The particular area to which this report refers is that drilled by National Lead Company as shown on the map of Robert M. Angas and Associates. The object of this project was to check the previous drilling results, determine the character of the overburden and ore strata as they would affect mining and concentrating, to determine ground water conditions, and to probe for any other information pertinent to future consideration of the area.

Four pits were dug, the overburden being so stripped as to expose an area 100'by 150' at the top of the ore seam. A sample of the ore seam was removed from each hole, the sample channel measuring 4' wide by 24' long by the depth of the ore. These pits were maintained dry by means of a well point system and other pumping arrangements.

Pit No. 1 was dug at Hole No. 4, Cross-section 4A.

Pit No. 2 was dug at Hole No. 4, Cross-section 3A.

Pit No. 3 was dug at Hole No. 7, Cross-section 2A.

Pit No. 4 was dug at Hole No. 10, Cross-section 1A.

Pit data is as follows:

HUMPHREYS GOLD CORPORATION

PIT 1
CS-4A, Hole 4

Overburden	Depth		Elev.
Top of Ground			53'
Sand	0		
Water - 42 well points installed	11'		42
Sand	4'		
Cemented brown sand	4'	19'	34
Ore			
Cemented sand	3'		
Hard Pan	1'		30'
Cemented sand	1'		
Clay	3'	8'	26'

8 truckloads of ore	44 tons	
2 " " O. B.	10 tons	
1 " " Hard Pan	6 tons	

DRILL SAMPLE RESULTS

	National Lead Co.	HGC
O. B. - Depth	19'	20'
Grade	0.9%	0.5
Ore - Depth	8'	5'
Grade	7.5%	10.3

Yds. O. B. Removed 10,000

HUMPHREYS GOLD CORPORATION

PIT 2
CS-3A, Hole 4

Overburden	Depth		Elev.
Top of Ground	0		49'
Sand	7'		
Water - 97 well points			42'
Sand	18'	25'	24'
Ore			
Cemented brown sand	8'		
Sandy clay	6'	14'	10'

7 trucks - Ore	35 tons
2 trucks - O. B.	10 tons

DRILL SAMPLE RESULTS

	National Lead Co.	HGC
O. B. - Depth	25'	25'
Grade	0.5%	0.7%
Ore - Depth	14'	12.5'
Grade	10.2%	10.9

Yds. O. B. Removed 13,500

HUMPHREYS GOLD CORPORATION

PIT 3
CS-2A, Hole #7

Overburden	Depth		Elev.
Top of Ground			55
Sand			
Water	7		
Sand	15		
Consolidated brown sand	5'	27	28
Ore			
Consolidated brown sand	4'		
Blue clay	1'		
Pink clay	1'	6'	22

4 truck loads of ore 24 tons

DRILL SAMPLE RESULTS

	National Lead Co.	HGC
O. B. - Depth	27'	27.5'
Grade	0.5%	0.5
Ore - Depth	6.	5'
Grade	9.3%	11.6

Yds. O. B. Removed 14,000

HUMPHREYS GOLD CORPORATION

PIT 4
CS-1A, Hole 10

Overburden	DEpth		Elev.
Top of Ground			64'
Sand	16		
Water - 94 well points			48
Sand	14		
Cemented brown sand	3	33'	31
Ore			
Cemented brown sand	6		
Clay and sand	10	16'	15'

7 truck loads of ore - 35 tons

DRILL SAMPLE RESULTS

	National Lead Co.	HGC
O. B. - Depth	33'	32.5'
Grade	0.6%	0.6
Ore - Depth	16'	17.5'
Grade	6.5%	6.7

Yds. O. B. Removed 25,000

HUMPHREYS GOLD CORPORATION

The ore samples from each pit were transported to the Jacksonville plant of Humphreys Gold Corporation and put through the spiral test plant. In addition, a weighted composite of the ore samples was put through the spiral test plant. Nearly all the spiral concentrate from the composite sample was received by Carpco Engineering & Manufacturing for dry testing. The portion of this spiral concentrate which we retained was dry milled in our laboratory.

HUMPHREYS GOLD CORPORATION METALLURGICAL DATA

A TiO_2 recovery of 87% was experienced by spiral treatment.

A 93% recovery of the TiO_2 recovered by spiral treatment was obtained by dry mill treatment. The rutile product assayed 93.4% TiO_2 and the ilmenite product assayed 62.0% TiO_2.

This pit sampling and additional drill sampling established the accuracy of the drill sampling previously done by National Lead Company. Based on the above there are in this area 11,739,000 tons of ore from which can be recovered by standard practice 60,560 tons of rutile ~~at~~ of 93.4% TiO_2 and 272,520 tons of ilmenite ~~at~~ of 62% TiO_2.

58,6
60,70

From this project sufficient information has been obtained to permit accurate planning for the mining of the area.

Frank McKinley
Plant Superintendent
HUMPHREYS GOLD CORPORATION

FMcK:nm

HUMPHREYS GOLD CORPORATION
SKINNER PIT SAMPLING PROJECT

OUTLINE OF PILOT SPIRAL AND DRY MILL TREATMENT OF SKINNER ORE

The pilot spiral plant consists of two 1st-stage, 5-turn spirals, one 2nd-stage, 5-turn spiral, and one 3rd-stage, 3-turn spiral. There is a 1st-stage feed bin and pump, a 2nd-stage feed bin and pump, a 3rd-stage feed bin and pump, and a 2nd-stage tailings holdup bin to allow the tailings to be metered back into the first-stage feed bin at about 1/2 rate. There is also a 1st-stage tailings bin.

The ore sample is placed at a convenient distance from the spirals so that a representative wheelbarrow load (about 200# dry ore) may be taken. A ramp extends from the floor to the 1st-stage feed bin. This ramp has a slope of 5-1/2° and a platform scale at the lower end. The wheelbarrow full of ore is weighed and sampled for moisture and grade and then dumped into the feed bin.

The concentrate from the 1st-stage spirals is laundered to the 2nd-stage feed bin. When this bin begins to fill, the 2nd-stage spiral is started. This concentrate goes to 3rd-stage feed bin. The 3rd-stage spiral is then put into operation and the concentrate is collected in large tubs. All middlings are recirculated back into the feed bin of the same stage. Tails go back to the immediately preceding stage. In the case of the 1st-stage, the tailings go to the tailings bin and are pumped out to waste. The 1st-stage spirals operate continuously and the

second and third stages intermittently as their feed bins fill.

A spiral run was made on the ore from the four pits individually and then a run was made on a composite ore sample from the four pits. Each spiral run consumed approximately two days. A total of 138 tons of ore was run. Timed samples were taken approximately every twenty minutes from each stage on head feed, concentrate, middling, and tailings on each run. The samples were dried, weighed, and assayed for heavy mineral and TiO_2.

DATA ON SPIRAL RUN OF COMPOSITED ORE

	Dry Wt. Tons	% HM	% TiO_2	Tons HM x 100	Tons TiO_2 x 100
New Feed - Actual	12.89	6.01	2.19	77.5	28.3
Concentrate - Actual	0.63	97.0	39.3	61.2	24.7
Tailings - Calculated	12.26	1.33	0.29	16.3	3.6
First Stage	TPH	% HM	% TiO_2	TPH HM x 100	TPH TiO_2 x 100
Head Feed	2.55	6.70	2.07	17.1	5.28
Concentrate	0.349	31.4	11.5	11.0	4.02
Middlings	0.339	5.67	1.36	1.92	0.46
Tailings	1.75	1.55	0.31	2.71	0.54
Calculated Head Feed	2.44	6.40	2.05	15.63	5.02
Operating Hours	6.6				

Second Stage

	TPH	% HM	% TiO_2	TPH HM x 100	TPH Ti02 x 100
Head Feed	0.916	31.6	10.2	28.9	9.34
Concentrate	0.238	75.3	28.6	17.9	6.81
Middlings	0.230	29.0	7.40	6.67	1.70
Tailings	0.487	6.66	1.41	3.24	0.686
Calculated Head Feed	0.955	29.1	9.63	27.8	9.20
Operating Hours	3.73				

Third Stage

Head Feed	0.830	74.6	29.0	61.9	24.1
Concentrate	.424	95.6	39.2	40.5	16.6
Tailings	.404	56.1	17.7	22.7	7.15
	0.828	76.3	28.7	63.2	23.8

Calculations:

Heavy Mineral Recovery = $\frac{0.63 \text{ Tons X } 96.5\% \text{ H.M.}}{12.89 \text{ Tons X } 6.01\%}$ = 79%

TiO_2 Recovery = $\frac{0.61 \text{ Tons X } 39.2\% \text{ Ti02}}{12.89 \text{ Tons X } 2.12\% \text{ Ti02}}$ = 87%

New Feed Rate = $\frac{12.89 \text{ Tons}}{6.6 \text{ Hours}}$ = 1.95 TPH

$\frac{1.95 \text{ TPH}}{2 \text{ spirals}}$ = 0.975 TPH/spiral

Head Feed Rate = $\frac{2.55 \text{ TPH}}{2 \text{ spirals}}$ = 1.275 TPH/spiral

% Circulating Load in 1st-stage Head Feed $\frac{1.275 - 0.975}{1.275}$ = 23%

Spiral Results:

	H. M.	TiO2
Ore	6.01%	2.19
Concentrate	96.5	39.3
Recovery	79.0%	87%

New Feed Rate	0.98 TPH/Spiral
Spiral Head Feed Rate	1.28 TPH/Spiral
% of Head Feed that is Circulating Load	23%

Dry Mill Treatment

For dry mill treatment a representative sample is cut down from the 3rd-stage spiral concentrate, assayed, and run over a laboratory size high tension separator and an induced roll magnet. The conductors (ilmenite and rutile) are separated' from the non-conductors on the high tension separator. The conouctors are then split into finished rutile and ilmenite on the magnet. The non-conductors are assayed for H.M. and the H.M. assayed for TiO_2 and ZrO2. The zircon sand in the non-conductors is assumed to average 67% ZrO_2 so that the % ZrO_2 in the non-conductors can be divided by 67% to obtain the weight of zircon sand in this fraction.

Following are the data and calculations on one of the dry milling tests run on a composite sample split down from the spiral concentrates from the five runs.

Spiral Concentrate - 51.8# - 96.5% Heavy Mineral - 40.5% TiO_2

51.8# X 96.5% H.M. = 50.0# H.M.

	Lbs.	% TiO_2	% ZrO_2
Rutile	5.25	93.4	
Ilmenite	23.65	62.0	
Non-Conductors	21.10	2.77	31.0

Zircon - 21.10# X 31.0% ZrO_2/67.2% = 9.75#

Rutile	5.25#	10.5%		13.6%
Ilmenite	23.65	47.3		61.2
Zircon	9.75	19.5		25.2
Economic Minerals			77.3%	100.0%
Other H. M.	11.35		22.7	
	50.00#		100.0	

TiO_2 Recovery: $\frac{(51.8\# \times 40.5\%) - (21.1\# \times 2.77)}{(51.8\# \times 40.5)} = 97.2\%$

Conclusions:

The material can be separated with present dry mill technique. Of the heavy mineral recovered by the spiral plant, 77.3% is economic. The breakdown of the economic mineral is 13.6% rutile, 61.2% ilmenite, and 25.2% zircon. A dry mill recovery of 93% would be a safe figure to use for a plant calculation. This figure was used in calculating ore reserves on this tract.

Jack H. Elledge

10-16-52

CARPCO ENGINEERING AND MANUFACTURING
Consulting Engineers - Manufacturers - Designers
JACKSONVILLE 6, FLORIDA

ADDRESS MAIL TO
P. O. Box 3272

PLANT LOCATION
HAINES AT 32ND STREET

Report On A. C. Skinner Tract Bulk Samples

Summary

Four bulk spiral concentrate samples from the A. C. Skinner tract have been examined and tested for the recovery of the contained rutile and ilmenite. It has been determined that conditioning of the material to remove an organic staining prior to dry milling will be necessary for at least part of the deposit and that an appreciable amount of leucoxene is present which will affect the grade of the final TiO_2 products. It has also been estimated that a 44.2% ilmenite fraction and a 9.2% rutile fraction should be recovered from the spiral concentrates assuming that the four samples are representative of the A. C. Skinner deposit.

Data

Preliminary tests were first conducted on small samples from each of the bulk samples, which were numbered 1, 2, 3 and 4 as received. This work showed that the material in samples 2 and 3 were made up essentially of clean grains and that the rutile-ilmenite fraction could be readily separated from the other minerals. The material from samples labeled 1 and 4 contained grains having a thin organic coating which noticeably affected the separation. A contaminated ilmenite-rutile fraction resulted. By scrubbing the sample to remove the stain a separation comparable to that obtained from samples 2 and 3 was obtained. For pilot plant test purposes samples 1 and 4 were combined into one lot and samples 2 and 3 were combined to make the second lot.

The lot comprising samples 2 and 3 were preheated. The conductive, rutile-ilmenite, fraction separated from the non-conductive fraction by high tension

separation. The ilmenite was separated from the rutile by induced roll magnetic separation and the final rutile produced by re-cleaning on the high tension separator. The data on the fractions produced from samples labeled 2 and 3 follows:

Sample No.	Description	Percentage by weight from spiral concentrate
(288-13)	Ilmenite fraction	48.9%
(310- 4)	Rutile fraction	10.4%
- - - -	Non-conductive fraction	40.7%
		100.0%

The second lot, comprising samples 1 and 4 was attrition scrubbed, recombined, dried, and the rutile-ilmenite fractions were produced in the same manner as the above samples. The data on these fractions follows:

Sample No.	Description	Percentage by weight from spiral concentrate
(295-7)	Ilmenite fraction	39.4%
(308-4)	Rutile fraction	8.9%
- - - -	Non-conductive fraction	51.7%
		100.0%

Assuming the above samples to be representative of the A. C. Skinner deposit, it is estimated that 44.2% ilmenite, 9.6% rutile and a 46.2% fraction containing zircon, staurolite, kyanite, garnet and other minerals can be recovered from the spiral concentrates if the concentrates are conditioned by scrubbing or some other method before dry milling.

It was further noted that the rutile-ilmenite fraction contained an appreciable amount of altered ilmenite and leucoxene, which tends to be a middling pro-

duct. This will affect the grade of the finished products by lowering the TiO_2 grade of the rutile somewhat, and likewise increase the apparent grade of the ilmenite. The pilot plant test was directed toward producing the cleanest possible rutile product.

The resulting titanium products have been delivered to the Humphreys Gold Corporation plant for shipment to Titanium Alloy Manufacturing Division of the National Lead Company at Niagara Falls, New York.

Respectfully submitted,
CARPCO ENGINEERING AND MANUFACTURING

By R. V. Spencer
R. V. Spencer

FORM 8—2M 1-51

ENGINEERING DEPARTMENT COMPUTATION SHEET

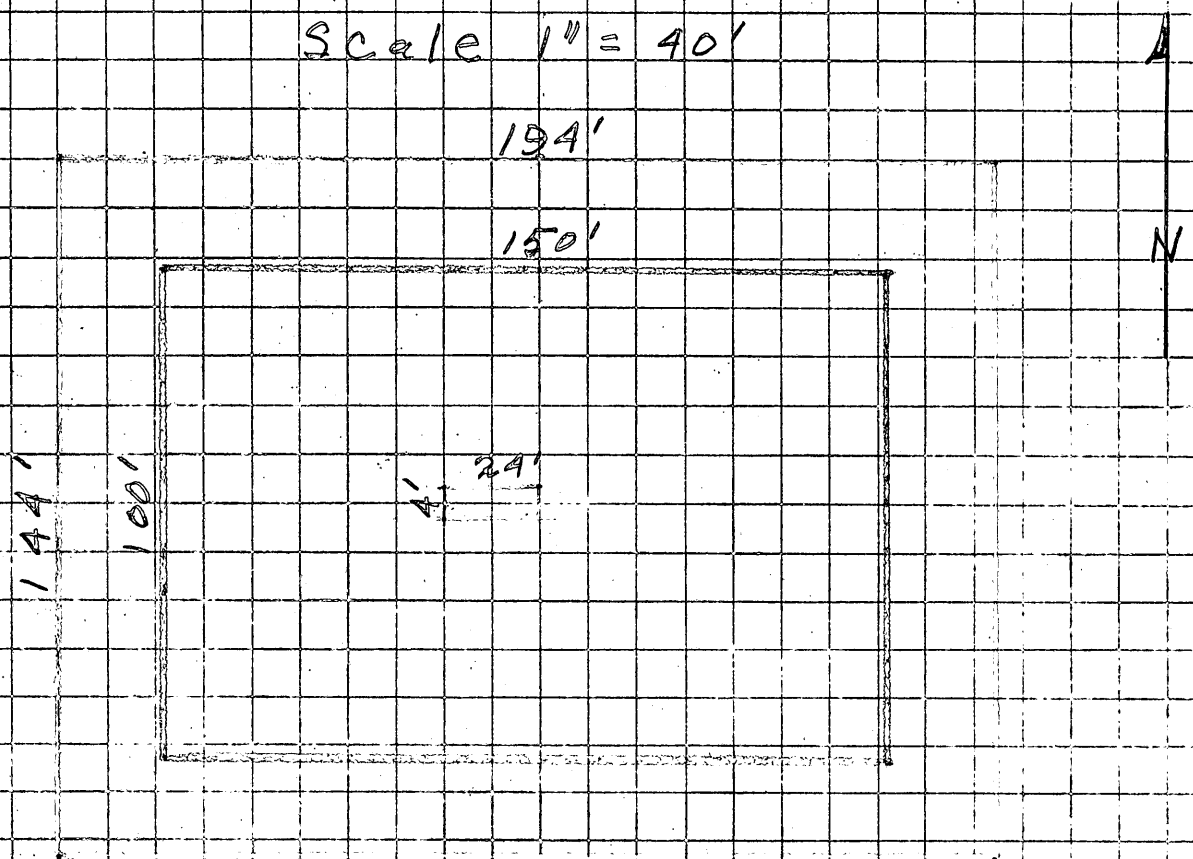
HUMPHREYS GOLD CORPORATION

SHEET NO.

TITLE OF PROJECT Skinner Test Pits

SUBJECT Pit #4 CS-1A Hole #10

Scale 1" = 40'



Surface Out line
— Top of ore
Bottom of Sample Pit

Depth of over burden = 33'
Depth of ore = 16'

Yds overburden removed = 25,000 Yds

DATE 10-10-52 SIGNATURE REF.

FORM 6—2M 1-61

ENGINEERING DEPARTMENT COMPUTATION SHEET

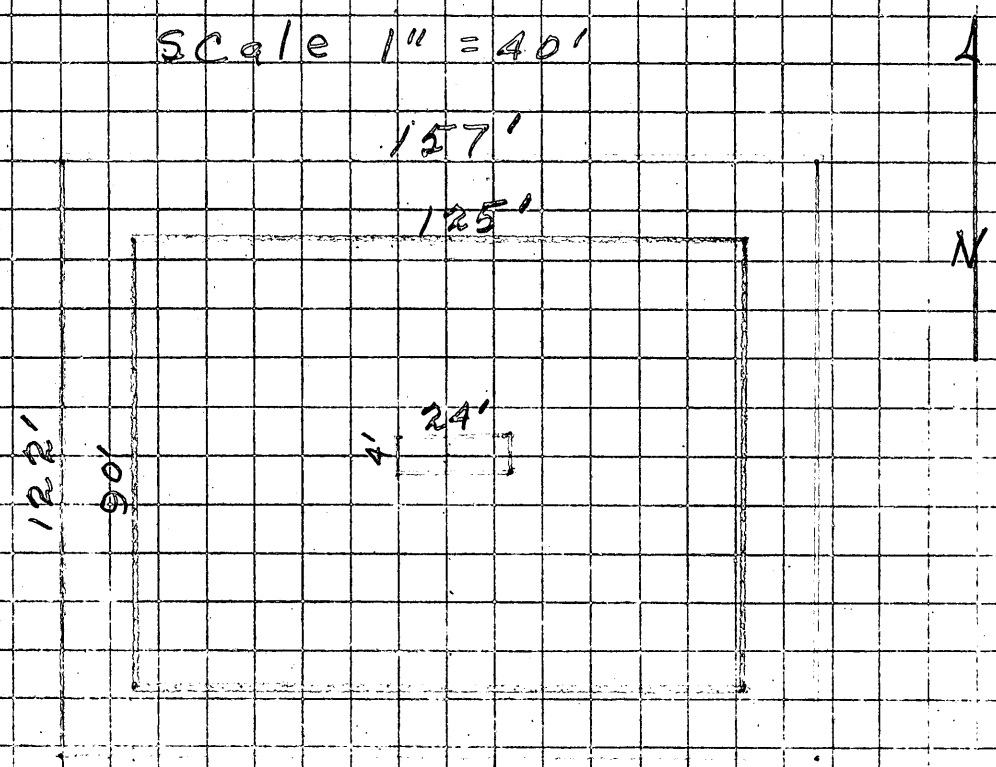
HUMPHREYS GOLD CORPORATION

SHEET NO.

TITLE OF PROJECT Skinner Test Pits

SUBJECT Pit #2 CS-3A Hole #4

Scale 1" = 40'



Surface Outline
Top of ore
Bottom of Sample Pit

Depth of Overburden = 25'
Depth of Ore = 14'

Yds overburden removed = 13,500 Yds

DATE 10-10-52 SIGNATURE REF.

FORM 8—2M 1-51

ENGINEERING DEPARTMENT COMPUTATION SHEET

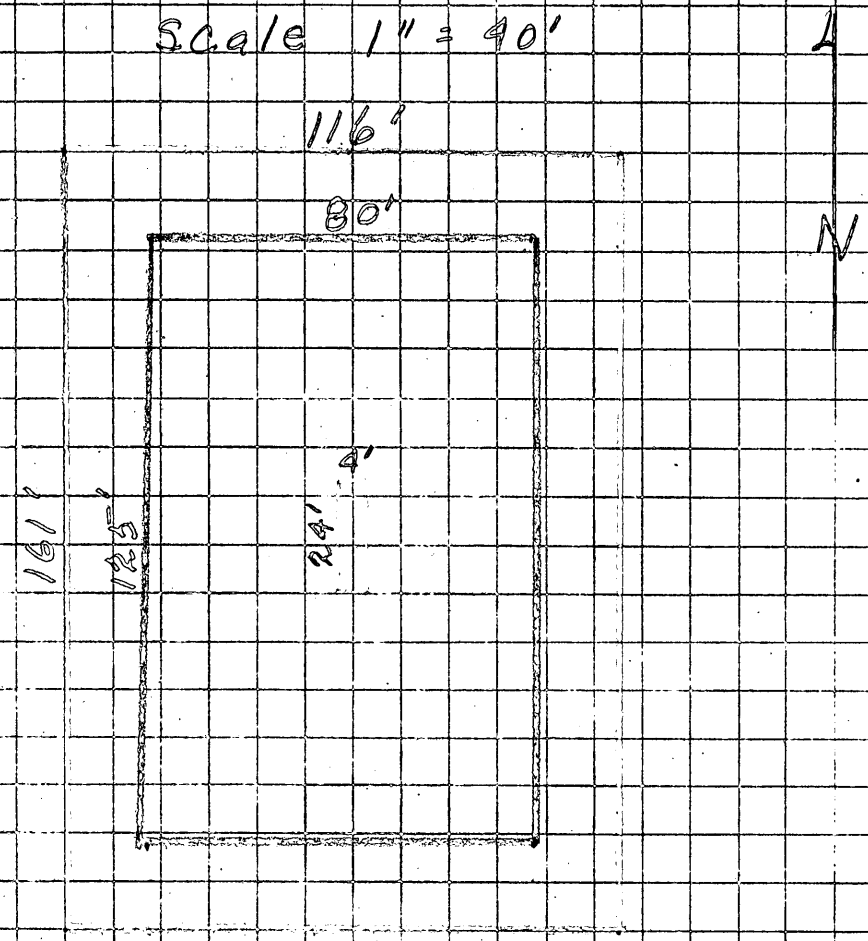
HUMPHREYS GOLD CORPORATION

SHEET NO.

TITLE OF PROJECT Skinner Test Pits

SUBJECT Pit #3 CS-2A Hole #7

Scale 1" = 40'



Surface Outline
Top of Ore
Bottom of Sample Pit

Depth of overburden = 27'
Depth of Ore = 6'

Yds Overburden removed = 14,000 Yds

DATE 10-10-52 SIGNATURE REF.

FORM 8—2M 1-51

ENGINEERING DEPARTMENT COMPUTATION SHEET

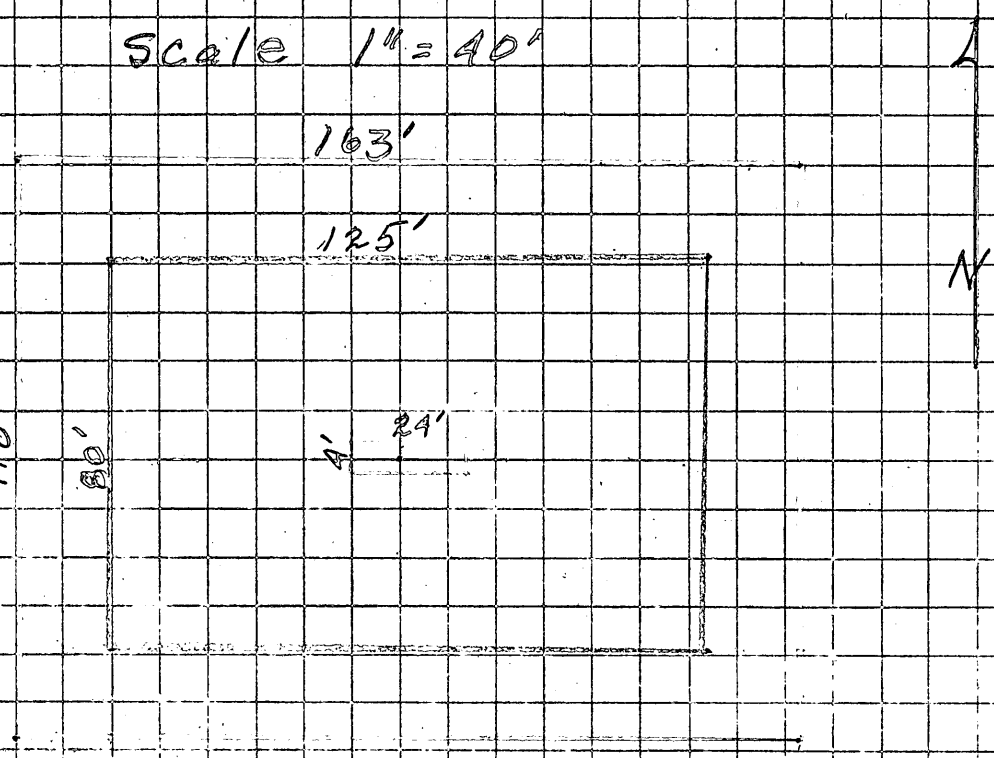
HUMPHREYS GOLD CORPORATION

SHEET NO.

TITLE OF PROJECT Skinner Test Pits

SUBJECT Pit #1 CS-4A Hole #4

Scale 1" = 40'



Surface outline
Top of ore
Bottom of Sample pit

Depth of Overburden = 10'
Depth of ore = 8'

Yds Overburden removed = 10,000 Yds

DATE 10-10-82 SIGNATURE REF

TITANIUM ALLOY MANUFACTURING DIVISION
NATIONAL LEAD COMPANY
111 BROADWAY
NEW YORK 6, N.Y.

October 20, 1952

As a result of the drilling and test pitting of the so-called Skinner Tract, this Company has purchased the property, and has purchased as well the Anders Property which lies to the north of the Skinner Tract.

The reason that both were purchased is that the operation of either singly would not be economic; together we feel there is sufficient mineral in the ground to warrant mining.

Our intention is, however, not to mine the property until we exhaust the properties on which we are now working. This will take place in approximately five years, we believe. It is necessary to wait until the present properties are exhausted because the equipment currently used for mining and concentrating can be used on the Skinner Property, thereby obviating the necessity for duplicating equipment and facilities, which would be the case if we were to start mining now.

TITANIUM ALLOY MANUFACTURING DIVISION
NATIONAL LEAD COMPANY

J. Murray Johnston

J. Murray Johnston
Manager

JMJ:avw

FILE COPY
SURNAME:

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Room 1, Post Office Building
Knoxville 2, Tennessee

October 28, 1952

Memorandum

To: Sam J. Wardell, Finance Officer, Region VII

From: Wm. A. Beck - Knoxville Office

Subject: Final Report & Voucher, National Lead Company, IMLA-2286, Idm-R264 (rutile)

Transmitted herewith are original and two copies of the subject report and voucher with certified documents.

The statement that the Operator has been reimbursed in the amount of 75% of $3,439.00 is in error. He has actually been reimbursed in the amount of $2,113.18 or 75% of $2,817.57.

The Field Team feels that you should send this to the Contract Administration and Audit Division in Washington for complete audit before payment is made on this voucher.

The starting date on this project was May 12, 1952, and the completion date October 23, 1952.

WAB/sm
cc:
Morris-3
Lynch
Laurence
Files.

(Rev.)

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
NOV 3 1952

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of MAY JUNE JULY, 1952 Docket No. DMEA 2286 Contract No.

Operator's Name National Lead Company Minerals RUTILE

Address 111 Broadway, New York 6, N. Y.

Contract Amount, $ 20,900.00* Government Participation: 75 % Amount, $ 15,675.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:*	This form 104 is made for reimbursement of 75% of $17,461.00, viz. $13,095.75.					
Drilling						
Bulldozing						
Crosscutting	Application was made on form 104 on May 29, 1952 for reimbursement of 75% of $3,439.00 for which payment has been received.					
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber	For details see attachments.					
Explosives		1. Invoice of Humphreys Gold Corporation dated August 25, 1952 for $17,460.89				
Pipe						
Track		2. Detailed Statement attached to the invoice				
		3. Copies of invoices, payrolls and charges comprising amounts listed on the detailed statement				
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS			17,460.89			

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

Date 10/20/52 *Payee National Lead Company

Per [signature] Title Manager

*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. Idm E264 in accordance with the terms of the contract.

Signature W. M. Beck Title Mining Engr. U.S.B.M. Date 10-28-52

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lawrence Title Executive Officer Region VII Date 10-28-52

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

04A
52)

Budget Bureau No. 42-R1151
Approval Expires 3-31-53
Defense Minerals Administration
RECEIVED
NOV 3 1952

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of MAY JUNE JULY 1952 Docket No. DMEA 2286 Contract No.

Operator's Name National Lead Company Minerals RUTILE

Address 111 Broadway, New York 6, N. Y.

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								
Test Pits	Pit			17456.28	4	4364.07		
Roads and Trails								
TOTAL DISTRIBUTED COSTS				17456.28				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased				4.61				
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc								
TOTAL COSTS				17460.89				

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

Date 10/20/52 Operator National Lead Company

Per J. Elmer Johnsky Title Manager

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

REMARKS:

(Instructions on reverse)

(For Government use only)

Form MF-1
(April 19

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

COPY COPY

August 25, 1952

TO NATIONAL LEAD COMPANY

Labor		$3,817.83
Supervision		495.00
Operating Materials & Supplies:		
Gas, Oil & Grease	$925.34	
Diesel Fuel	418.77	
Pipe & Pipe Fittings	153.36	
General Supplies	36.88	1,534.35
Operating Equipment:		
Rental -		
Transfers for heavy equipment	206.00	
Dump trucks	333.72	
Wellpoint system & Pumps	1,373.06	
Dragline	3,381.00	
Bulldozer	1,860.00	
	7,153.78	
Purchase	4.61	7,158.39
Miscellaneous:		
Repairs to Equipment	1,962.49	
Sampling & Analysis	2,187.40	
Payroll Taxes	305.43	4,455.32
		$17,460.89

COPY

TITANIUM ALLOY MANUFACTURING DIV.
NATIONAL LEAD COMPANY

111 BROADWAY
New York 6, N. Y.

October 23, 1952

Mr. Robert A. Laurence, Executive Officer
DMEA FIELD TEAM, Region VII
Room 13, Post Office Building
Knoxville, Tennessee

Re: DMEA 2286 (Rutile)
IDM-E264

Dear Sir:

The work on the subject contract has been completed and in that connection we enclose the following documents:

1. Five copies of Geological and Engineering Report supported by relative documents listed in the first page of the report.

2. Five copies of Form MF-104 and five copies of Form MF-104a. To the first copy of these forms, supporting invoices, payrolls and charges are attached.

We have previously been reimbursed for 75% of $3439 on subject contract, so that now we are entitled to reimbursement of 75% of the remainder of the contract amount.

We trust that the documents we are submitting here meet with your approval and that payment of our bill may be made promptly.

Very truly yours,

s/
P. E. Connell
For J. Murry Johnson
Manager

Copied by zm.
Oct. 28, 1952

Norris-3
Lynch
Beck
Laurence

T ITANIUM ALLOY MANUFACTURI

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

COPY COPY

Mr. Robert A. Laurence
Executive Officer
DMEA Field Team, Region VII
Room 13, Post Office Building
Knoxville 01, Tennessee

Re: Docket DMEA-2286
Contract Idm-E-264
National Lead Company

Dear Mr. Laurence:

In accordance with a request from Mr. Wardell the final MF-104 on the reference contract has been reviewed and a Report of Review prepared. One copy of the Report of Review, together with a copy of my letter of this date to Mr. Warrdell is enclosed for your files.

Since the Field Team's final report has not been received and I have no personally ascertained from you or Mr. Beck that the work was completed satisfactorily, it would be appreciated if you would address a memorandum to Mr. Wardell, with copy to this Division, advising of your acceptance of the work.

Mr. Chambers had this project on his list of reviews to be made during his contemplated visit to Knoxville and Norris. Please advise him that the review has been made.

Sincerely yours,

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

Enclosure
EDTalbert/wb
November 6, 1952

Copy to: Docket
Admr. Reading File
Mr. Wardell
Mr. Chambers

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

COPY

Mr. Sam J. Wardell
DMEA Finance Officer
Bureau of Mines
P. O. Box 217
Norris, Tennessee

Re: Docket DMEA-2286
Contract Idm-E264
National Lead Company

COPY

Dear Mr. Wardell:

As requested by your memorandum of October 31, 1952, the final MF-104 submitted for the referenced contract has been reviewed and a Report of Review prepared. The original and one copy of the Report of Review, together with all papers forwarded with your letter, are enclosed.

Your attention is called to the last paragraph of the Report of Review. Since the final report of Field Team has not been received and I have not verified the satisfactory performance of the work by personal contact with the Executive Officer or the examining engineer a definite statement that the work has been completed satisfactorily should be obtained from Mr. Laurence. Also, since Exhibit "A" of the contract provides that "The allowable costs of the project **** will be the payments made by the Operator to the independent contractor, plus the amount carried over ****" (underscoring supplied), it will be necessary to have the Operator either certify on the invoice that payment has been made to the sub-contractor or present evidence of such payment in the form of a copy of the paid invoice or a photostat of the canceled check.

The red penciled checks and figures on the sub-contractor's invoices were made by me during my review. It will be noted there are several errors, the aggregate of which favors the sub-contractor. However, since the contract would allow payment of only a few cents more, these may be disregarded.

The face of the MF-104 indicates that payment has been received for the work done under the first contract. No copy of the MF-104 was received by this office. If payment was made please forward a copy to us.

Best regards,

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

EDTalbert/wb
November 6, 1952

Enclosure
Copy to: Docket, Admr. Reading File, Mr. Laurence, Mr. Talbert.

5D

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION

~~WASHINGTON 25, D. C.~~

Room 13, Post Office Building
Knoxville 2, Tennessee

July 9, 1952

Memorandum

To: Operating Committee, D. M. E.A. Washington

From: Executive Officer, D. M. E. A. Knoxville

Subject: DMEA-2286, Idm-E264 (rutile) National Lead Co.

Enclosed herewith are two copies of a memorandum by R. A. Spencer, describing progress on the subject exploration project at the time of his visit to the project early in June.

We have not yet received vouchers from National Lead Company for work done in May or June under this contract.

Robert A. Laurence

Robert A. Laurence

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
KNOXVILLE
JUL 11 1952

FILE COPY
SURNAME:

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.
Room 13, Post Office Building
Knoxville 2, Tennessee

Beck
Lynch
Houk
Spencer
Opr. Com.
Files

June 26, 1952

Memorandum

LGN.

To: Sam Cardell, Regional Finance Officer, DMA

From: Robert A. Laurence, Executive Officer, DMA-Region VII

Subject: National Lead Co., DMEA-2206, Idm-1264 (rutile)

Mr. Beck and I have discussed with Mr. Talbert, the February MF-104 for the subject contract, and Mr. Talbert's Memorandum of June 25 to you.

We agree with Mr. Talbert's interpretation of the several items listed, and concur in his recommendation that the voucher be approved for payment in the amount of $2,113.18.

Robert A. Laurence

RAL/am

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 30 1952

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

SOUTHEASTERN REGION
REGION VII

OFFICE OF
REGIONAL DIRECTOR

P. O. BOX 217
NORRIS, TENNESSEE

June 25, 1952

Memorandum

To: Mr. Sam J. Wardell, DMEA Finance Officer, Region VII

From: E. D. Talbert, Asst. Chief, Contract Administration and Audit Division, DMEA

Subject: National Lead Company, Contract E-264, Docket 2286

Reference is made to the Feb. MF-104, pertaining to the subject contract, which you submitted to the Contract Administration and Audit Division for review prior to payment.

On the basis of the operator's explanations outlined in his letter of June 19, 1952 (a certified copy of which is enclosed), and providing the DMEA Executive Officer for Region VII concurs, it is suggested that your certification and approval for payment of the MF-104 take into consideration the recommended disallowances indicated in the following listing:

Costs Claimed on Feb. MF-104			Recommended Disallowances
National Lead (Payroll)	2/4 - 2/10	$502.23	$ 0
" " "	2/11- 2/17	299.92	0
" " "	2/18- 2/24	196.05	148.58(1)
" " "	2/25- 2/29	189.20	189.20(1)
National Lead (Supt.)	2/1 - 2/15	208.34)	19.84(2)
" " "	2/15- 2/29	208.33)	
Carpco (Testing)	2/13,14 & 17	125.00	0
Humphreys Gold (Foreman)	Feb.	585.37	360.97(3)
" "(Clearing & Reprs)	Feb.	903.70	0
" " (Materials)	Feb.	196.67	0
" " (Rprs,etc.)	Feb.	95.46	0
Jax Paper Co.(Supplies)	Feb.	25.89	0
Total		$3,536.16	$718.59

(1) Pay of drillers and driller-helpers for period of Feb. 19 to 29 after completion of exploration work on Feb. 18.

(2) Services of superintendent for Feb. 1, one work day prior to date of contract.

(3) Excess over maximum rate of $102. per week established by contract for the 2 1/5 weeks, from Feb. 4 to 18, that exploration work was performed under the contract.

On the basis of the foregoing the recommended allowable costs amount to $2,817.57. Since the contract calls for 75% participation by the Government payment to the contractor in the amount of $2,113.18 is recommended.

The MF-104 with supporting documents attached is returned herewith.

E. D. Talbert

Enclosure

cc: Mr. Laurence
Mr. Hauk
Mr. Chambers

Y

National Lead Company

111 Broadway

New York 6, N. Y.

June 19, 1952

Defense Minerals Exploration Administration
Department of the Interior
Washington, D. C.

Attention - Mr. E. D. Talbot (Room 2612)

Dear Sirs:

We wish to furnish certain additional information which you have requested in connection with DMEA Contract #2286. The original voucher was submitted on Form MF-104 dated May 29, 1952.

1. The exploration work authorized under Contract #2286 was completed February 18, 1952. Drilling actually started on December 3, 1952 but no claim for reimbursement was made for work performed prior to the date of the government approval of the contract - February 4, 1952.

2. Invoices from Humphreys Gold Corporation, Nos. J-710, J-704, &-699, and invoice from Jacksonville Paper Company, cover materials and repairs for work performed during the period of February 4th to 18th 1952. Job #501 listed on invoice J-699 was for clearing of the land preparatory to the drilling operations performed during the same period.

3. Voucher for Chas. Chase for the two payroll periods February 1 - 15 and February 15 - 29, covers work authorized under Government contract #2286, which included clean-up work and the writing of the final report.

Very truly yours,

/s/ J. Murray Johnston

J. Murray Johnston

JMJ:avw

AIR MAIL

SPECIAL DELIVERY

FILE COPY
SURNAME:

800

Talbert

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

Mr. Sam J. Wardell
Finance Officer
Bureau of Mines
P. O. Box 217
Norris, Tennessee

JUN 17 1952

Re: Docket DMEA-2286
Contract No. Idm-E264
National Lead Company

Dear Mr. Wardell:

Receipt is acknowledged of your memorandum of June 11, 1952, transmitting the February MF-104 for the subject contract.

Mr. J. P. Bonner, the local representative of the National Lead Company, has been contacted and advised that the representation that the Non-Metallic Minerals Division and the Contract Administration and Audit Division had approved the costs covered by this MF-104 was not appreciated. The facts in this case are that Mr. Bonner presented certain documents purportedly covering the costs for the month of February which we casually reviewed for the purpose of preparing the new contract. It was determined that the amount of $3,439.00 represented the maximum amount of the costs in which the Government could participate. At that time Mr. Bonner was advised that the actual amount to be paid could not be determined because of insufficient identification of the costs, and it is evident from this submission that only part of the missing information has been supplied, namely, the identification by titles of the classes of labor.

Mr. Bonner again has been requested to obtain additional information to substantiate and identify the costs. It is hoped that such information will be available this week and it is my intention to bring this MF-104 with me on my contemplated visit to your office.

Sincerely yours,

(Signed) E. D. Talbert

6/17

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

EDTalbert/wb
June 17, 1952

Copy to: Admr. Reading File
Mails & Files
Mr. Houk
Mr. Laurence, Region VII
Mr. Chambers

COPY

June 16, 1952

Memorandum

To: Robert A. Laurence, Executive Officer, IMEA Field Team, Region VII, Knoxville, Tenn.

Thru: J. R. Thoenen, Chief
Minerals Tech. Div. Reg. VII

From: R. V. Spencer

Subject: National Lead Corp. (Rutile), IMEA-2286, Idm-E264.

Work under the above contract was started on May 15, 1952, by the Humphreys Gold Corp., contractor for the National Lead Corp. To date the four pits, as indicated on the sketch accompanying the contract, have been excavated and between 45 and 50 tons of heavy mineral-bearing sand from each pit has been delivered to the Humphreys pilot spiral plant. Bulk samples of the barren overburden and the sandy clay basement material were also taken for study. Pit "D" has been backfilled and pit "C" is being backfilled at this time. About half of the bulk samples have been run through the spiral plant for the separation of the heavy minerals. Further separation of the heavy minerals into the various fractions will be done by high tension and induced roll magnet separators by the Carpco Engineering and Manufacturing Corp., Jacksonville, Florida. These fractions will then be sent to the National Lead Corp. at Niagara, N.Y., for further study and testing.

45-50 tons heavy minerals from each pit
↓
To Humphreys Pilot Spiral Plant
↓
Magnetic Separators
Carpco Eng. & Mfg. Co. Jacksonville
↓
Fractions to Nat'l Lead Corp. Niagara N.Y. for further testing & study

It is estimated by Humphreys that all work under this contract, so far as Florida is concerned, will be completed by the end of July. Samples, details of sampling costs, and other pertinent data on the deposit will have been submitted to National Lead by that time.

Equipment used on the job consisted of the following:

1 - K-48 Link Belt dragline with 60-ft boom and 2-yard bucket.
1 - RD7 Caterpillar bulldozer.
2 - Half-track trucks.
1 - Jeep (other trucks were used part time to haul supplies and samples).
1 - Well Point system, consisting of piping, well points and 6" vacuum pump. (This equipment was rented and was made by the Griggin Well Point Corp., N.Y., N.Y.)

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
JUN 17 1952

1 - 6" self-priming pit pump
1 - 4" high pressure jet pump
1 - 4" self-priming centrifugal pump
1 - 3" self-priming centrifugal pump
1 - 2" self priming centrifugal pump

Work at the pits was on a continuous basis, 3 shifts, 7-day week.

Description of work:

Sampling at pits B, C and D had been completed at the time of this visit. Pit D had been backfilled, pit C was partly backfilled, and pit B was full of water. Pit A was excavated nearly to the heavy mineral zone. Conditions at pits B, C and D were reported as follows:

Pits approx 50x50 yds 45-50 tons

Pit	Thickness of Overburden	Thickness of Heavy Mineral Zone	Size of Pit At Surface
B	27 ft.	6 ft.	150' x 150'
C	25 ft.	14 ft.	150' x 150'
D	19 ft.	8 ft.	150' x 150'

The size of pits B and C at the surface was verified by inspection. Pit A was 100' x 200' at the surface, had 33 feet of overburden, and 16 feet of heavy mineral zone.

The hydraulic condition of the sand deposits in this area makes it difficult to obtain representative samples and especially representative bulk samples of the ore. In this particular deposit the heavy minerals zone is overlain by a considerable thickness of barren material. The water table varies from 6 to 12 feet below the surface. As observed at pit A, the method used to handle the water while excavating consisted of a combination of centrifugal pumps and a well point system. First, a sump was dug with the dragline that extended below the water table, which was approximately 12 feet deep at this location. Slightly above the water table level an area 100 ft. by 200 ft. was excavated. A 6-inch pipe line with 1-1/2" connections spaced 3 feet apart was laid around the perimeter of this area. One and on-half inch well points were jetted down 10 to 12 feet in depth and connected to the header. A 6-inch pump maintained approximately 16-lb vacuum on the header. The water was discharged into the sump which was kept pumped down by centrifugal pumps. As the area was de-watered the pit area within the boundary of the well points was excavated to the heavy mineral horizon. The well points were extended to this

level. A shallow ditch was dug with the dragline in the "ore" zone around the outer perimeter of the bottom of the pit, leaving an island of ore in place in the center of the pit. There was some surplus seep water that the well points did not pick up and this drained to a sump in one corner of the pit, from which it was pumped to the surface. The sample was obtained by digging a trench through the heavy mineral zone with the dragline and leading the material directly into trucks. The trench was maintained at dragline bucket width. Any material which sloughed off the sides of the trench was cast aside. The heavy mineral zone is somewhat more consolidated than the barren overburden and the sides of the ditches stand fairly well for a short time. The pit (A) in which the sampling was observed was deeper and had a thicker heavy mineral zone than the other pits (B,C and D). Some difficulties were encountered near the bottom of this pit. The "ore" zone from 33 feet to 42 feet was sufficiently consolidated that the sides stood fairly well. At 42 feet an unconsolidated water-bearing sand was encountered which tended to flow into the trench and necessitated casting a large tonnage of sand aside in order to maintain a clean trench. This in turn undermined the more consolidated material, which caved. Two shifts of back casting were required to provide space for the additional material which had to be cast aside in order to maintain a clean ditch. Sampling was continued through the unconsolidated material to about 48-ft depth, at which depth it became necessary to abandon the pit due to excessive caving. The true basement formation of fine sandy clay was not reached. Some clay was coming in, however, in the last couple of samples. The drill logs showed the bottom of the heavy mineral zone to be at 49 feet.

This method of sampling, aside from the recovery of bulk samples of heavy mineral-bearing material for test purposes, gave the opportunity to examine the deposit with respect to "hardpan" and buried stumps. These were two items that caused considerable difficulty at the Trail Ridge deposit in Florida. At that deposit the hardpan was known but the extreme hardness had not been anticipated and the buried stumps were unknown until mining operations were initiated. At the pits which were put down on this deposit some "hardpan" was encountered but, as it would disintegrate fairly easily by hand pressure alone, no difficulties were anticipated if mining were undertaken. A few small roots were observed in the heavy mineral zone but none were over 2 or 3 inches in diameter and appeared to be in a soft, decayed state.

s/ R. V. Spencer

FILE COPY
SURNAME:

Beck
Lynch
H. Miller
Houk
Opr. Com.Wash.
Files

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION
[redacted]
WASHINGTON 25, D. C.
Room 13, Post Office Building
Knoxville, Tennessee

June 3, 1952

Mr. J. Murray Johnston, Ass't Mgr.
National Lead Company
111 Broadway
New York, N.Y.

Re: DMFA-2286 (rutile)
Ida-R264

Dear Mr. Johnston:

This will acknowledge receipt of your letter of May 29, and five copies of MF-104 covering work done in February on the subject contract.

Your voucher totals $3,536.16. Please note that Annex 2 of the revised contract dated May 12, states that "a sum in no event greater than $3,439.00..... is carried over into the new contract to which this is an annex, to be treated as one of the costs of said new contract in which the Government will participate under the provisions thereof". Therefore, 75% of $3439, or $2,579.25 is the maximum amount for which payment can be approved.

Please note that form MF-104 is to be accompanied by a narrative report of progress during the month, as well as unit cost data in the space provided on page 4 of MF-104. In the future, we will withhold approval of any vouchers until these data are received.

After discussing this with our Washington office, I am forwarding the voucher to the Regional Fiscal Officer, approving the amount of $2,579.25 subject, of course, to further audit by that office.

Yours very truly,

Robert A. Laurence, Executive Officer
DMFA Field Team, Region VII

RAL/mm

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 5 1952

NATIONAL LEAD COMPANY

111 BROADWAY

NEW YORK 6, N.Y.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 3 1952

May 29, 1952

Mr. Lawrence G. Houk
Department of the Interior
Defense Minerals Exploration Administration
Room 4637 Interior Building
Washington 25, D. C.

Exploration Project for Rutile
Skinner Tract, Florida
Docket No. DMEA-2286

Dear Sir:

On February 4, 1952 you awarded us subject Exploration Contract. In this Contract the Government agreed to loan 75% of the approved costs incurred, not to exceed 75% of the estimated expenses of $42,449.90.

It so happened that we started this project on December 3, 1951, and that by the date the contract was signed, the major part of this exploration was finished.

On February 18, 1952, the drilling program on the Skinner tracts was completed and after that date only test work on drilling samples and some surveying were continued.

The satisfactory results in the northern parts of the A.C. Skinner tract made us decide to drill some holes in the adjoining area. As we expect that you will be interested in a complete picture of the results, we have included the figures obtained in the periods before and after the term of the contract in the final report that we are submitting herewith. (4 copies)

We are also sending you here four photostatic copies of the Humphreys Gold contract, and four photostatic copies of the letter from Stockton, Whatley, Davin & Company to Skinner extending the option.

If any more information may be desired, we will be glad to assist you.

Very truly yours,

J. Murray Johnston

J. Murray Johnston
Assistant Manager

JMJ:avw
enclosures

D. M. E. A. DOCKET NO. 2286
EXPLORATION DRILLING FOR RUTILE ON THE PROPERTIES
OF A. C. AND R. G. SKINNER IN DUVAL COUNTY, FLORIDA

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
JUN 13 1952

- FINAL REPORT -

A drilling program was initiated to ascertain the rutile content of the underlying sands on the properties of A. C. Skinner and R. G. Skinner in Duval County, Florida.

The drilling started December 3, 1951, and on February 4, 1952, the Defense Minerals Exploration Administration awarded Contract DMEA No. 2286 in which this authority granted a loan not to exceed 75% of the estimated expenses of $42,449.90.

The drilling program under this contract was concluded on February 18, 1952. In the period from the date of the contract until completion, 44 holes were drilled, as listed in Exhibit I, and shown on the map, Exhibit 2. In this final period the cross-sections 1A and 2A were completed. Cross-section 5B and a few holes on other sections were drilled to determine the economical limits of the ore body and to check some earlier results. The approximate boundaries are shown in a double line on the map, Exhibit 2.

The complete drilling program, as started on December 3, 1951, and concluded on February 18, 1952, has resulted in the discovery of a substantial ore body, located mainly on the property of A. C. Skinner and extending only for less than one-quarter mile southward into the property of R. G. Skinner. Some ore was found under and west of the proposed highway, which will divide those properties lengthwise. However, those deposits underlying and west of the highway were not considered in calculating the ore reserves.

Because of the satisfactory results near the northern border of the A. C. Skinner tract, two cross-sections were drilled later in the adjacent property of Mr. Anders. The results of this drilling established ore reserves in the Anders tract that increased previous reserves.

All holes drilled since the start, December 3, 1951, are shown on the map, Exhibit III. For each case where ore was found, the thickness in feet of the overburden and the percentage of heavy minerals contained therein are shown above the thickness and heavy mineral content of the mineral sands.

The following tables show the results in the better parts of the deposit:

TABLE I

Name of Tract	Area in Acres	Million Tons of: Overburden	Mineral Sands	Ratio OB/MS
Anders	112	4.61	2.70	1.7
A. C. Skinner	405	23.83	8.38	2.8
R. G. Skinner	25	0.89	0.66	1.3
Total Area	542	29.33	11.74	2.5

TABLE II

	Average Depth in Feet: Overburden	Mineral Sands	Heavy Minerals in Mineral Sands %	Tons
Anders	16.8	8.9	6.0	162,000
A. C. Skinner	24.6	9.0	7.8	653,600
R. G. Skinner	15.0	10.5	6.3	41,600
Total Area	22.5	9.0	7.3	857,200

The percentages of heavy minerals in the A. C. Skinner tract were determined by floating the lighter minerals in a heavy liquid. The so cleaned heavy mineral concentrates were subjected to high tension and magnetic separations to obtain rutile and ilmenite concentrates and rejects of zircon and other heavy minerals, mostly garnet, staurolite and andalusite. The results of these separations indicate the distribution of mineral products as given in Table III.

TABLE III

Mineral	Average Content in Percent	Total Tonnage Present: Anders	A.C.Skinner	R.G. Skinner	Total
Rutile	11.1	17,982	72,550	4,618	95,149
Ilmenite	40.4	65,448	264,054	16,806	346,309
Zircon	18.6	30,132	121,570	7,738	159,439
Others	29.9	48,438	195,426	12,438	256,303
Total	100.0	162,000	653,600	41,600	857,200

Those figures show the presence of substantial tonnages of the valuable minerals, rutile and ilmenite. The minerals like zircon and others have no value at present.

The overburden which averaged about 0.8% heavy minerals will probably not be of economic importance since tests showed that the heavy minerals carried only 8.9% rutile and 29.8% ilmenite, while those minerals were of much finer size than those encountered in the mineral sands, from which a low recovery may be predicted.

CONCLUSION

The drilling program has exposed substantial tonnages of rutile and ilmenite on the A. C. Skinner tract and the adjacent tracts of Anders and R. G. Skinner. The heavy mantle of overburden which covers the mineral sands forms a new mining problem in this area, for which the drilling program could not supply the answers.

The real values of those deposits can only be determined after digging several pits of adequate size. This work will enable us to determine the proper mining procedure and to estimate the costs of mining. It must be followed up by concentration tests on the mineral sands dug from those pits and separation tests on the heavy mineral concentrates produced, to determine the actual quantities of rutile and ilmenite, which may be expected.

J. Vandenberg.

J. Vandenberg

May 8, 1952
JV:etk

FILE COPY
SURNAME

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C. 600

MAY 26 1952

Mr. Robert A. Laurence
Executive Officer, DMEA
Field Team, Region VII
Room 13, Post Office Building
Knoxville 1, Tennessee

Subject: Docket No. DMEA-2286 - Rutile
National Lead Company
Duval County, Florida
$20,900.00

Dear Mr. Laurence:

Please find herewith a copy of a contract covering the subject exploration project which has been signed by this office for the Government with register number and effective date as shown.

The contract has been signed by the National Lead Company, and the distribution of the contract has been made.

A copy of the contract required by the Regional Finance Office will be forwarded directly by the Washington Finance Section.

Sincerely yours,

(signed) FRANK E. JOHNSON

Chairman, Operating Committee
Defense Minerals Exploration
Administration

Enclosure

LGHouk:gad 5/23/52

Approved:

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

A. M. Lemmon (HB)
Member, Geological Survey

Copy to: Admin. Reading File
Operating Committee (2)
Mr. Cservenyak, 3413
Mr. Bryson, G-232, GSA Bldg.
Docket File
Mr. Houk

FILE COPY
SURNAME:

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C. 600

MAY 2 6 1952

Mr. H. C. Wildner
Vice-President, National Lead
Company
111 Broadway
New York, New York

Subject: Docket No. DMEA-2286 - Rutile
National Lead Company
Duval County, Florida
$20,900.00

Dear Mr. Wildner:

Transmitted herewith is copy of contract covering the subject exploration project which has been signed by this office for the Government with register number and effective date as shown.

Sincerely yours,

C. O. Mittendorf

Acting Administrator
Defense Minerals Exploration
Administration

Enclosure

LGHouk:gad 5/23/52

Copy to: Admin. Reading File
Docket File
Mr. Cservenyak, 3413
Mr. Bryson, G-232, GSA Bldg.
Operating Committee
Field Team, Region VII
Mr. Houk

NATIONAL LEAD COMPANY

111 BROADWAY

NEW YORK 6, N.Y.

H. C. WILDNER
VICE PRESIDENT

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 21 1952

May 19, 1952

Defense Minerals Exploration Administration
Department of the Interior
Washington 25, D. C.

Subject: Docket No. DMEA-2286
Rutile - Duval County,
Florida

Attention of Mr. C. O. Mittendorf, Acting Administrator

Gentlemen:

Returned herewith are six signed copies of the subject contract. It is assumed that the effective date of the contract will be May 12, 1952, since this was the date we were notified by your office that work could commence.

Very truly yours,

H C Wildner

Vice-President.

HCW/krk

Enclosures-6

FILE COPY
SURNAME:

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C. 600

MAY 15 1952

Hoffmund
Talbert
Houck
Lemmon
Hedges
Jefferson

Mr. H. C. Wildner
Vice-President, National Lead
Company
111 Broadway
New York, New York

Subject: Docket No. DMEA-2236 - Rutile
National Lead Company
Duval County, Florida
$20,900.00

Dear Mr. Wildner:

Transmitted herewith are six copies of the subject contract for your approval and signature provided the contract is satisfactory.

Please return all copies of the contract to this office for signature.

Sincerely yours,

C. O. Mittendorf (fw) 5/15/52

Acting Administrator
Defense Minerals Exploration
Administration

Enclosures 6

LGHouk:gad 5/12/52

Copy to: Admin. Reading File
Docket File
Operating Committee
Mr. Cservenyak, 3413
Mr. Bryson, G-232 GSA Bldg.
Mr. Houk

NATIONAL LEAD COMPANY

111 BROADWAY

NEW YORK 6, N.Y.

May 8, 1952

Mr. Lawrence G. Houk
Department of the Interior
Defense Minerals Exploration Administration
Room 4637 Interior Building
Washington 25, D. C.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 9 1952

Dear Mr. Houk:

Enclosed herewith you will find:

1. Copy of letter contract between National Lead Company and Humphreys Gold Corporation, under the terms of which Humphreys Gold agrees to perform for National Lead Company the work of test pitting and evaluating the Skinner Property, for a sum not to exceed $17,461.00.

2. Copy of letter from Stockton, Whatley, Davin & Company, to Mr. A. C. Skinner, extending the Option on Mr. Skinner's property, for an additional six months from May 27, 1952.

3. Photostatic copies of vouchers paid by National Lead Company in connection with the drillings of the Skinner Property.

I trust that all of these documents are in the form you require and that their receipt will make it possible for you to take immediate action on the proposal we have made to you for you to share in the cost of the test pitting of the Skinner Property.

For your information, drilling on the Skinner Tract was started on December 4, 1951 and was finished on February 18, 1952. Further test work was done after completion of the drilling, particularly by the Carpco Engineering Company.

Very truly yours,

J. Murray Johnston

J. Murray Johnston
Assistant Manager

JMJ:avw
enclosures

IN REPLY REFER TO:

G-MD-RPB

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

May 7, 1952

Memorandum

To: Lawrence G. Houk, Nonmetallics Division, Defense Minerals Exploration Administration.

From: Robert P. Bryson, Nonmetallics Commodity Committee.

Subject: National Lead Company amendment to application DMEA-2286, E-264 for additional aid in exploration for rutile in Florida. $13,095.

Reference is made to the subject application for further aid in exploration of certain mineral lands located approximately 10 miles southeast of Jacksonville in Duval County, Florida. This phase of the exploration is to consist of test-pitting by dragline at several points on the property where drilling is reported to have delineated a body of heavy mineral-bearing sands. Bulk samples aggregating 100 tons will be removed for later concentration and ultimate metallurgical experimentation. Work is to be started within four weeks after aid is granted and the project is estimated to require four months for completion.

It appears from the statements covering preliminary results from the drilling, that 70,000 tons of rutile has been blocked out on the two Skinner properties. On the basis of previous information furnished by the applicant, this would insure a 16 year life for the property if operated on the scale contemplated. This represents an important reserve and it is believed that the project should be given every reasonable encouragement.

It should be pointed out, however, that no documentation has been furnished with the current application to substantiate the applicant's conclusions as to tonnage and grade. It would be desirable to have this supplemental information, reviewed by the field team, before final affirmative action is taken on the amendment under consideration.

Robert P. Bryson

Robert P. Bryson

A. E. HUMPHREYS, PRESIDENT
I. B. HUMPHREYS, VICE-PRESIDENT
D. G. BROWN, VICE-PRESIDENT

JUDSON S. HUBBARD
VICE-PRESIDENT AND TREASURER
WILLIAM C. BENTON
VICE-PRESIDENT AND COUNSEL

HUMPHREYS GOLD CORPORATION

RUTILE-ILMENITE-ZIRCON DIVISION
P. O. BOX 5492
JACKSONVILLE 7, FLORIDA

May 6, 1952

Mr. J. Murray Johnston, Assistant Manager
Titanium Alloy Manufacturing Division
National Lead Company
111 Broadway
New York 6, N. Y.

Dear Murray:

This letter is written to confirm the understanding reached between your company and our company in regard to the sampling project on the A. C. Skinner tract, Duval County, Florida.

We will excavate four pits spaced at one-half mile intervals through the barren overburden sand and through the underlying ore for the purpose of examining mining conditions with particular reference to the occurence of hardpan in the ore. The pits will be made so that no overburden will cave or run into the pit in the ore itself. A representative sample of approximately forty tons of the ore will be removed from each pit and trucked to our plant for pilot plant concentration tests. Each pit will be not less than 50' by 50' in area by the depth necessary to reach the bottom of the ore. Depth is estimated to be approximately as follows:

Pit No.	Depth O. B.	Depth Ore	Total Depth
1	33	18	51
2	27	14	41
3	22	11	33
4	17	9	26

Separate wet gravity concentration tests will be made on the material from each pit. The products recovered as concentrates will be delivered to Carpco Engineering, Jacksonville, Florida, for magnetic and electrostatic concentration tests. The final products produced by Carpco Engineering will be shipped to Niagara Falls for your disposal. Costs are estimated as follows:

Excavation - 4 pits	11,573.80
Trucking samples	726.00
HGC pilot plant tests	1,924.20
Carpco Engineering	1,500.00
Freight on products to Niagara Falls, N. Y.	150.00
Total	15,874.00
Contingencies 10%	1,587.00
Total not to be exceeded	17,461.00

Accepted 5/8/52
J. Murray Johnston

Very truly yours,

STOCKTON, WHATLEY, DAVIN & COMPANY
GENERAL REAL ESTATE
MORTGAGES-INSURANCE-RENTALS
CORNER BAY AND LAURA STREETS
JACKSONVILLE 2, FLORIDA

May 5, 1952

Mr. A. C. Skinner
Route 8, Box 105
Jacksonville 7, Florida

Re: Option Agreement Between A. C. Skinner and Virginia B. Skinner and National Lead Company Dated 27th November 1951

Dear Mr. Skinner:

We have been instructed by the National Lead Company to pay you the sum of $691.00 for the purpose of extending the captioned option for an additional six months. We quote paragraph 5 of the option, which has to do with the rights of the National Lead Company insofar as the extension is concerned:

> "IT IS EXPRESSLY UNDERSTOOD AND AGREED that the Purchaser may extend or renew the option hereby granted it for the period of six months after the expiration of the six months originally granted by this option, and this option shall be automatically extended or renewed for six months from the date of the expiration of the option originally granted hereunder, upon the payment on or before such original expiration date to the Seller of the sum of Six Hundred Ninety-one and No/100 Dollars ($691.00). Upon the payment of the said sum of Six Hundred Ninety-one and No/100 Dollars ($691.00) in addition to the sum of Six Hundred Ninety-one and No/100 Dollars ($691.00) the receipt of which is hereabove acknowledged, said option and all the terms and provisions thereof shall continue, be renewed and extended for and until the expiration of twelve months from the date of this Agreement, and said sum of Six Hundred Ninety-one and No/100 Dollars $691.00) shall be applied upon the purchase price in the event of the exercise of the option."

The National Lead Company has informed us that the exploratory work now in process will be completed reasonably soon, say within 90 days.

Please sign the copy of this letter in the space indicated and return

to us for our file.

Very truly yours,

Josh L. Watson
Vice President

JLW:mgh

ACCEPTED:

A. C. Skinner

Virginia B. Skinner

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

May 5, 1952

Memorandum

To: Lawrence Houk, Chief
Non-Metallics Minerals Division, DMEA

From: F. J. Cservenyak, Acting Chief
Light Metals Branch
Minerals Division

Subject: Amendment to DMEA - 2286, E-264
Loan to cover costs of bulk sampling
and metallurgical testing:
SKINNER LANDS, DUVAL COUNTY, FLA.

The subject application has been reviewed and the cost estimate for proposed testing appears to be reasonable and in order.

Rutile is still reported to be in short supply, and any increase in domestic production that may be obtained as a result of the work outlined in this application, would be desirable. Approximately two-thirds of the 17,200 tons of rutile consumed in the United States in 1951, was imported.

F. J. Cservenyak

F. J. Cservenyak

FILE COPY
SURNAME:

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C. 600

May 2, 1952

Memorandum

To: Acting Administrator, DMEA

From: Chief, Non-Metallic Minerals Division, DMEA

Subject: Policy on bulk sampling.

Reference is made to memorandum of April 25, 1952, from Howard I. Young, DMPA, stating that bulk sampling and testing may be regarded as exploration. The Operating Committee concurs that bulk sampling and testing may be regarded as exploration subject to review of the application. when its a part of project

The applicant proposes to dig four pits 50x50x32 taking a bulk sample of 100 tons of mineral sand to be processed at the Laboratory of Humphrey Gold Corporation near Jacksonville, Florida. Heavy mineral fraction will be forwarded to the Laboratory of the Carpco Engineering and Machinery Corporation at Jacksonville, Florida, for electromagnetic separation. The rutile concentrates will then be forwarded to National Lead Company's Niagara Falls Laboratory for evaluation. The total estimated cost of the project is $17,460, with the Government participating with $13,095.

It is recommended that this new application be made an amendment to the former Contract DMEA-2286, Idm-E264.

N.S
R+R

Lawrence G. Houk, Chief
Non-Metallic Minerals Division
Defense Minerals Exploration
Administration

Resume of drilling under original contract according to the National Lead Company:

1.	Acres of mineral sand	428
2.	Tons of overburden	22,822,000
3.	Tons of mineral sand	8,399,654
4.	Tons of Rutile contained	70,214
5.	(a) Tons of Rutile recoverable	± 47,000
	(a) Based on 90% Mining recovery	
	80% Wet Mill recovery	
	93% Dry Mill recovery	

Copy to:

COPY

DEFENSE MATERIALS PROCUREMENT AGENCY

Washington 25, D. C.

April 25, 1952

Mr. C. O. Mittendorf
Acting Administrator
Defense Minerals
Exploration Administration
Washington 25, D. C.

2286

Dear Mr. Mittendorf:

During the past several months we have had discussions with representatives of the National Lead Company regarding possible production of rutile from the "Skinner Tract" in Duval County, Florida. We anticipate negotiating a purchase contract with National Lead which will enable the tract to be put into production providing that results of exploration demonstrate the project to be economically feasible.

We understand that preliminary drilling accomplished under Exploration Project DMEA-2286 indicated the presence of a substantial tonnage of rutile but that additional work must be done to demonstrate that economic recovery of the mineral is feasible. It is our understanding that National Lead is now applying for exploration assistance to accomplish bulk sampling and testing.

In view of the unusual nature of the deposit we are of the opinion that bulk sampling and testing may be regarded as exploration, and because of an interest in augmenting domestic rutile supply, we would appreciate your giving National Lead's new application covering the "Skinner Tract" favorable consideration.

Sincerely yours,

/s/ Tom Lyon
for

Howard I. Young
Deputy Administrator

Mr. Brown

NATIONAL LEAD COMPANY

111 BROADWAY

NEW YORK 6, N.Y.

H. C. WILDNER
VICE PRESIDENT

March 31, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY - 2 1952

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

Subject: D. M. E. A. 2286

Re: Loan to cover the costs of bulk sampling and metallurgical testing: SKINNER LANDS, DUVAL COUNTY, FLA.

Dear Sirs:

We are enclosing herewith:

1. Application form MF 103 for aid for an exploration project, covering the costs of bulk sampling and metallurgical testing of an ore deposit recently drilled under DMEA No.2286 on the lands of R.G.and A. C. Skinner, Duval County, Florida. Both stages of drilling have been completed and a report is now being prepared which will be submitted with the invoice. A quantity of over 70,000 tons rutile was found, which seems favorable. The economic value can only be determined, however, after testwork proposed in this application is finished.

2. Cost estimate of testing the deposit to determine the most economical method of mining and dressing and to determine the yield of valuable concentrates and costs of mining and dressing.

3. Cost estimate of testwork to determine the quality and usefulness of the concentrates for application in industry. This work was mentioned briefly on Page 2, Sub.3, in our letter of January 8, 1952, at which time it was expected to cost between $15,000.00 and $20,000.00.

The final estimate, according to enclosed papers, is $17,460.00 and we kindly request your approval of the loan of $13,095.00 to enable us to proceed with this important job.

Very truly yours,

H. C. Wildner

Vice President

HCW:ae
encl.

4/2/52

NATIONAL LEAD COMPANY
111 BROADWAY
NEW YORK 6, N.Y.

TITANIUM DIVISION

Fre

Jacksonville, Florida.
March 30, 1952.

Mr. A. R. Reiser, Assistant Manager,
Mining Department,
National Lead Company,
111 Broadway,
New York 6, N. Y.

cc { GV GCM

Dear Al:

In this mail and under separate cover are two copies of a report on the National Lead Company's drilling which has been done in Skinner's Pasture and on Reconnaissance in this area since the latter part of November, 1951.

With best wishes,

Am headed for Mexico. Will return about Wednesday. Hope you can get approval by this time.

J Boman

Will you hold the report for me.

Very truly yours,

Charles Chase

Charles H. Chase.

THIS PAPER OPACIFIED AND BRIGHTENED WITH TITANOX A (TITANIUM DIOXIDE)

INVOICE

No. J 710

HUMPHREYS GOLD CORPORATION

RUTILE - ILMENITE - ZIRCON DIVISION
P. O. BOX 5492
JACKSONVILLE, FLORIDA

SOLD TO: National Lead Company
Jacksonville, Florida
ATTNF C. Chase

DATE March 25, 1952

SHIP TO:

YOUR P. O. NO.

SHIP VIA:

TERMS: Net

VOUCHERED
APR 3 1952
National Lead Co.
Titanium

QUANTITY	DESCRIPTION	UNIT PRICE	AMOUNT
Job #			
529	Build (3) pan racks	$ 14.40	
559	Repair (2) Barnes pumps	43.57	
564	Repair drive head	6.83	
572	Repair drive head	3.02	
582	Repair (1) Barnes pump	11.73	
		79.55	
	Overhead 20%	15.91	$ 95.46

CHANGED 4/9

J 710 95.46
J 695 3.57
J 699 903.70
J 704 196.67
J 709 585.37
1784.77

PAY →

4-62
OTHER DEFERRED CHGS
T.A. M ILM.

INVOICE

No. J 704

HUMPHREYS GOLD CORPORATION

RUTILE - ILMENITE - ZIRCON DIVISION
P. O. BOX 5492
JACKSONVILLE, FLORIDA

SOLD TO: National Lead Company
Jacksonville, Florida
ATTN: C. Chase

DATE March 21, 1952

SHIP TO:

YOUR P. O. NO.

SHIP VIA:

TERMS: Net

QUANTITY	DESCRIPTION	UNIT PRICE	AMOUNT
6	1" Unions	$ 4.14	
1 gal.	Pyrene	3.45	
150'	1/2" Wire Rope	19.92	
21'	1/2" Pipe	2.24	
502.4 gal.	Gasoline	121.58	
2 cases	3 qts. Oil	12.56	
		163.89	
	Overhead 20%	32.78	$ 196.67

TAM Div

VOUCHERED
APR 3 1952
National Lead Co.

INVOICE

No. J 699

HUMPHREYS GOLD CORPORATION

RUTILE - ILMENITE - ZIRCON DIVISION
P. O. BOX 5492
JACKSONVILLE, FLORIDA

SOLD TO: National Lead Company
Jacksonville, Florida
Attn: Mr. C. Chase

DATE March 17, 1952

SHIP TO:

YOUR P. O. NO.

SHIP VIA:

TERMS: Net

QUANTITY	DESCRIPTION	UNIT PRICE	AMOUNT
Job #501	Clearing		$ 212.14
502	Repair Dodge Power Wagon		126.20
505	Repair 6 X 6 Drill Rig		180.42
506	Repair halftrack Drill Rig		105.20
513	Servicing Dodge Pickup Truck		16.37
517	Make (2) Jet Pipes		10.73
518	Repair drive Head		6.94
521	Make (3) Jet Tips		4.56
533	Repair (2) Barnes Pumps		13.72
538	Repair Drive Head		4.56
543	Repair (1) Lawson Pump		46.73
545	Make (6) Drive Bits		7.79
547	Repair Drive Head		8.39
548	Repair Drive Hammer		4.77
553	Repair Drive Head		4.56
			$ 753.08
	Overhead 20%		150.62
			$ 903.70

TAM D

VOUCHERED
APR 1952
National Lead Co.

INVOICE

No. J 709

HUMPHREYS GOLD CORPORATION

RUTILE - ILMENITE - ZIRCON DIVISION
P. O. BOX 5488
JACKSONVILLE, FLORIDA

SOLD TO: National Lead Company
Jacksonville, Florida
ATTN Mr. C. Chase

DATE March 21, 1952

SHIP TO:

YOUR P. O. NO.

SHIP VIA:

TERMS: Net

QUANTITY	DESCRIPTION	UNIT PRICE	AMOUNT
	To reimburse us for wages paid to Humphreys employees while working for National Lead Co. Drilling during February, 1952.		
	M. C. Thompson	$ 487.81	
	Overhead 20%	97.56	$ 585.37

Approved
9-2-52

EXHIBIT I

DMEA DOCKET NO.2286

LIST OF DRILLHOLES ON SKINNER TRACT
FEBRUARY 4 THROUGH FEBRUARY 18,1952

Date February	Cross-Section	Hole No.	Total Depth	Overburden	Ore	% Heavy Mineral in Ore	
4	1	20	49 Ft.	17 ft.	4 ft.	5.5	
4	2A	3	49	41 ft.	4 ft.	7.8	
4	"	4	49	45	4	12.5	
4	"	5	49	47	2	14.3	
4	"	6	49	37	6	8.3	
4	"	7	49	27	6	9.3	
5	"	8	49	21	14	13.0	
5	"	9	49	25	6	6.0	
5	"	10	49	15	4	8.9	
5	1A	1	49	10	5	4.5	
5	"	2	49	27	14	7.6	
5	1	10	49	15	2	4.5	
6	1	11	43	43	-	-	
6	1A	3	49	23	6	6.2	
6	"	4	49	23	6	5.2	
6	"	5	49	33	6	7.2	
6	"	6	49	33	8	6.7	
6	"	7	49	37	6	6.3	
7	"	8	49	41	6	8.0	
7	"	9	49	37	8	8.6	
7	2	6	49	25	4	5.8	
7	"	9	49	33	6	9.3	
8	1A	10	49	33	16	6.5	
8	"	11	45	33	6	4.9	
8	"	12	39	31	4	10.1	
8	"	13	39	15	6	7.9	
8	3	9	49	33	4	7.0	
11	3A	8	35	10	11	7.3	
11	2	20	50	36	6	9.0	
11	"	21	54	38	12	5.4	
11	5B	4	49	19	22	3.4	
12	5B	1	39	39	-	-	
12	"	2	39	39	-	-	
12	"	3	39	21	2	5.7	
12	"	5	39	10	5	8.1	
12	"	6	39	5	16	4.5	
12	"	7	39	39	-	-	
13	1A	14	39	39	-	-	
13	3A	9	29	29	-	-	
13	4A	8	39	15	10	4.3	
14	1A	15	29	29	-	-	
15	2	21a	61	39	18	6.3	Redrill
15	5	26	39	39	-	-	
18	5B	4a	45	17	24	3.2	Redrill
TOTAL:		44	1,996 ft.	1,263 ft.	289 ft.		

March 13, 1952

Mr. Robert A. Laurence calling Mr. Lawrence G. Houk, Chief, Non-Metallic Min.

Mr. Laurence: I went down to Florida to look over that National Lead Co. Rutile deposit, DMEA-2286, on Monday and Tuesday. The The contract was dated February 4. They completed all the work prior to February 4, then they went back and made 45 check holes and they made 2026 feet.

Mr. Houk: Anything completed February 4 is out. We cannot pay for it.

Mr. Laurence: They have put repairs at Humphries building $2500. Do you think we should pay it.

Mr. Houk: No, I don't think we should, that is a question I will have to ask the lawyers.

Mr. Laurence: 7.66 heavy mineral. 9,039,000 tons is what they estimate of the 57.60 rutile. 15.9 rutile, 57% ilmenite, 26.5 zircon.

Mr. Houk: What about monazite?

Mr. Laurence: Nothing on monazite.

Mr. Houk: Was the metallurgical testing completed?

Mr. Laurence: No they have those composite samples.

Mr. Houk: We can pay for that under the contract. How about that consultant fee. Are they preparing a report?

Mr. Laurence: Yes they are preparing a report. All of these things are going to be prepared by the New York Office. That is the monthly report, Riser wrote to the superintendent down there and asked for a report after Feb. 4, and th the 8th they drilled 45 holes. Close sections are not numbered like ours. The man had never seen the contract until I showed it to him.

Mr. Houk: How many lines did they drill?

Mr. Laurence: They didn't drill 9 or 10. 11 or 12. They ran out on line 8. All the rest of them.

Mr. Houk: Did they move down on 1/2 mile?

Mr. Laurence: Line 21 is called 1. Line 20 - 1a. 17 is 4. 6 is 6a. 7 is 7a. 8 is 10. Skipt 12. 7 is called 9. 8 is called 10. Check drilling was on 1, 1a, 2, 3, 3a, 4, 5, and 5b.

Mr. Houk: I would like to know just where those check holes were.

Mr. Laurence: I don't know just where they are but he gave me the lines they were on.

Mr. Houk: How many holes did he drill in all?

Mr. Laurence: I don't know. Do you have anything from Riser?

Mr. Houk: Nothing from Riser.

Mr. Laurence: The operating cost was $2,304.06. 45 ~~hours~~ holes totaling 2,026 ft.

Mr. Houk: That cost is lower than we figured.

Mr. Laurence: Nothing on ~~depression~~ [illegible].

Mr. Houk: Roughly I would say we are not liable for anything under that contract except testing of the composite samples. I will have to talk with the lawyers. If we do not supply the cost, we cannot certify the discovery made.

Mr. Houk: What about labor costs?

Mr. Laurence: He cannot breakdown those. He made an estimate on that.

Mr. Houk: You can accept a warehouse receipt from Humphries. I don't think they can hold us up on labor cost.

Mr. Laurence: How much does the superintendent get.

Mr. Houk: I think he gets $500 a month. He makes around $6,000. $3,000 expenses. They completed a lot sooner than was anticipated.

Mr. Laurence: On that drilling after February 4, we got an item of $2500.

Mr. Houk: They have put in that item?

Mr. Laurence: That item is ~~xxx~~ in the contract. It has not been used at all.

Mr. Houk: How much money have they said they have spend after Feb. 4.

Mr. Laurence: That $2,304.06

Mr. Houk: Just for the check hole?
If they come in and supply you with vouchers and other labor supplies and the $400 for ~~metallic~~ testing and the consulting fee, I think we can then make a certification. Costs incurr ed after the 4th of Feb. There will be no necessity for us to make a certificate of discovery.

Mr. Laurence: The operating equipment that Humphries built, I think we will have to pay the repairs.

Mr. Houk: They have not ~~xxxxx~~ billed you for anything yet.

Mr. Laurence: They showed me the letter.

Mr. Houk: The only legitimate expense would be those check holes.

Mr. Laurence: Nothing in the contract for check holes.

Mr. Houk: Your question is do we pay for the repairs? On the repairs, we will have to ask Hofflund about it anc call you back. Do we make a certification.

Mr. Laurence: I think the best thing to do is cancel the whole thing. They have to pay it back anyway. The reason they went in and did the work so quickly was because they had an option on it.

Mr. Houk: We made every effort to get the thing through as rapidly as possible. I think it would be to their advantage to pay the costs. They can come in and get money for metallurgical testing and build a laboratory. They are figuring on coming in for $15,000 or $20,000.

Mr. Laurence: And then when they get a certification they will come to the Government for for the loss for plant.

Mr. Houk: We will just have to take their word for it. I want to talk with the lawyers and call you back. Any hurry?

Mr. Laurence: No, I don't think so just want to bring you up to date on it.

Mr. Houk: What about the sink hole?

Mr. Laurence: I haven't seen Pete since I got back from there.

Mr. Houk: Is there a possibility of certification on any of those?

Mr. Laurence: Cabe will have a certification.

Mr. Houk: I didn't get a chance to talk with you about that additional personnel. Do you need it?

Mr. Laurence: I don't think we do. Wait until after the mica program goes into effect. They might have to ship someone in here for that period. We would rather be a little too busy for a short period than have the overstaffing. Right now we are a little short. We have men we can borrow.

Mr. Houk: Isn't Griffith leaving soon?

Mr. Laurence: Yes. We can borrow Hadley and Brooke.

Mr. Houk: Ok. Say, on that Flynt & Keller they have a small area. 1.2 acres. We are trying to develope that but talk with Sam Phillips.

Mr. Laurence: Pete can answer that on Friday, he will be back then.

Mr. Houk: Where can we reach him?

Mr. Laurence: Skyway Hotel, Franklin, N. C. The only way you can get him is to call and have him call back.

Mr. Houk: Will he be in Franklin tomorrow.

Mr. Laurence: He will leave there tomorrow.

Mr. Houk: On the Bess Gaston, we are drawing up a contract . 125' of shaft and 75' of drift.

Mr. Laurence: Are you putting in for diamond drilling on that.

Mr. Houk: $6 or $7.

Mr. Laurence: I believe we will put in for $7 and have some leeway.

Mr. Houk: The only thing holding it up is that we do not know the property lines. Collins says we will give them an area 500 feet around the center of the shaft. They should be big enough to take care of anything we find there.

Mr. Houk: Do you have anything else.

Mr. Laurence: What do you know about the mica program?

Mr. Houk: Freeman is in Atlanta today and tomorrow.

Mr. Laurence: ~~Pete~~ Frank heard that it would be announced this week. Apparently it will be published in the county news this week. That is just a rumor.

Mr. Houk: I was just talking with Norton and he has some suggestions about what we should do. He has an idea a lot of people will go out on their own. There is some money over there.

Mr. Laurence: There has always been private money over there. If they can get a lead.

Mr. Houk: Well, anything else?
Say, what is the story on that N. C. halloysite.

Mr. Laurence: The story is that a little of the kaolin property is halloysite.

Mr. Houk: That is what I heard.

Mr. Laurence: How strategic is halloysite? What does it sell for?

Mr. Houk: It must be catalytic grade. The Bureau is trying to develop tests to determine whether or not it is catalytic grade.

Mr. Laurence: That halloysite has been known 40 years, but until they open it up nothing can be done.

Mr. Houk: Anything new on Hitchcock?

Mr. Laurence: They have completed 4 holes.

Mr. Houk: Then I will get what information I can by letter.

Jacksonville Paper Company

IMPORTERS - WHOLESALERS - MANUFACTURERS

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808 WEST BAY STREET PHONE 6-4141

JACKSONVILLE, FLORIDA

NATIONAL LEAD CO.
% HUMPHRIES GOLD CORP.
P. O. BOX 5492

TERMS: 2-20-52
64978
2-10-30

SALESMAN

ALL CLAIMS MUST BE MADE UPON RECEIPT OF GOODS
WE ARE NOT RESPONSIBLE FOR GOODS DAMAGED IN TRANSIT

THIS BILL BECOMES DUE AT ONCE IF PURCHASER SUSPENDS PAYMENT, SELLS OUT OR INCUMBERS STOCK

FORM 29—X520—24M—6-2-51

3 CASES ½ PINT PAPER CANS	3	8.55	25.65
		TAX	.77
			26.42
			.02
			.5284
			26.42
			.53
			25.89

Pd. by ck. # 227
2.29.52

Vo 3-4-52

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INVOICE

CARPCO ENGINEERING AND MANUFACTURING

Consulting Engineers • Manufacturers • Designers

JACKSONVILLE 6, FLORIDA

ADDRESS MAIL TO
P. O. BOX 3272

PLANT LOCATION
HAINES AT 32ND STREET

INVOICE NO. 2109

TO: National Lead Company
111 Broadway
New York, N. Y.

DATE February 29, 1952

YOUR P. O. NO. 3/3/52

SHIP TO: Attention: Mr. Gloyd M. Wiles

SHIP VIA:

TERMS:

QUANTITY		DESCRIPTION	UNIT PRICE	AMOUNT
Man Days		Consulting and laboratory services, month of February, 1952		
2		2/1 Dry separations - Trail Ridge	$ 50.00	$ 100.00
1-1/2		2/4 do - do		75.00
		Shipping containers do		8.96
		1/22 Telephone - Milliken - Dahlstrom		3.50
		2/12 Photostats - Ponte Vedra drill logs		148.31
		Maps do		4.36
1	x	2/13 Mineral evaluations - R. G. Skinner		50.00
	x	2/14 do A. C. Skinner		50.00
		1/16 Telephone Alan Stanley - New York		7.85
		1/18 do do		3.50
		2/4 do do		8.82
		2/6 do Wiles - West Palm		4.20
1/2	x	2/17 Calculations - A. C. Skinner		25.00
		Total		$ 489.50

VOUCHERED
MAR 5 1952
$ 50.00
National Lead Co.
Inc. Div.

364.50 (51)

(62)

Cat 1110 Chg Trail Ridge Lit Dev. of OCCIPO JAM Div Jan

185.50

487.50

FLORIDA EXPLORATION

CASH DISBURSEMENT

February, 1952

Date		
4	Rent and telephone	$102.00
5	Office supplies	2.75
6	Stamps	3.00
9	Postage	1.68
16	Postage	.99
16	Pencil	1.55
16	Hardware	.39
		$112.34
	Check No. 205	150.00
	Cash on hand 2/1/52	8.95
		$158.95
	Less	112.34
	Balance 3/1/52	$ 46.61

VOUCHERED
MAR 1 1952
National Lead Co.
TITANIUM DIV.

V03-42

NAME Chase, Charles H.
ADDRESS C/o Humphreys Gold Corp
P.O. Box 5462
Jacksonville Fla

S.S. NO. 521 ~~11~~ 14 3368.
TAX CLASS 4. M.

YEAR 1952.
DATE OF BIRTH 4/28/16.
LOCATION Ilmenite Exploration.

DATE EMPLOYED 1/26/51.
DATE LEFT 4/30/52

EFFECTIVE DATE	SALARY (HALF MONTH)	ANNUAL SALARY		WITHHOLDING TAX	F.O.A.B.	S.U.I.	RETIRE ANNUITY	HOSPITALIZATION	SAVINGS FUND	INCOME TAX	GROUP LIFE INSURANCE	INSURANCE	WAR BONDS	MISC.
	208.34.	5000.00.	416.67 Mo.	18.80.	3.13.									
	208.33.			18.80.	3.12.									

ACCOUNT

PERIOD ENDING	REGULAR	OVERTIME	TO DATE	PREVIOUS	GROSS THIS PERIOD	WITHHOLDING TAX	F.O.A.B.	S.U.I.	RETIRE ANNUITY	HOSPITALIZATION CODE	HOSPITALIZATION AMOUNT	SAVINGS FUND	INCOME TAX CODE	INCOME TAX AMOUNT	GROUP LIFE INSURANCE	INSURANCE CODE	INSURANCE AMOUNT	WAR BONDS	MISC. CODE	MISC. AMOUNT
JAN 15	208.34		208.34 S-		208.34	S- 18.80	3.13													
JAN 31	208.33		416.67 S-	208.34	208.33	S- 18.80	3.12													
FEB 15	208.34		625.01 S-	416.67	208.34	S- 18.80	3.13													
FEB 29	208.33		833.34 S-	625.01	208.33	S- 18.80	3.12													
MAR 15	208.34		1,041.68 S-	833.34	208.34	S- 18.80	3.13													
MAR 31	208.33		1,250.01 S-	1,041.68	208.33	S- 18.80	3.12													
						112.80	18.75													
APR 15	416.67		1,666.68 S-	1,250.01	416.67	S- 37.60	6.25													
						150.40	25.00													

REMARKS:

750 12-51 P2312 systematic BUSINESS FORMS, NEW YORK, N.Y.

NATIONAL LEAD COMPANY, Titanium Division
111 BROADWAY, NEW YORK, N. Y.

FILE COPY
SURNAME:

Houk

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C. 600

FEB 8 1952

Mr. Robert A. Laurence
Executive Officer
DMEA Field Team, Region VII
Room 13, Post Office Building
Knoxville 1, Tennessee

Subject: Docket No. DMEA-2286 - Rutile
Duval County, Florida
National Lead Company
$42,449.90

Dear Mr. Laurence:

Please find herewith a copy of a contract covering the subject exploration project which has been signed by this office for the Government with register number and effective date as shown.

The contract has been signed in this office by the representative of the National Lead Company, and the distribution of the contract has been made.

A copy of the contract required by the Regional Finance Office will be forwarded directly by the Washington Finance Section.

Sincerely yours,

2/28

(signed) FRANK E. JOHNSON
(JHB)

Chairman, Operating Committee
Defense Minerals Exploration
Administration

Enclosure

Approved:

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

L P Thayer
Member, Geological Survey (Rh)

LGHouk:gad
2/6/52

Copy to: Admin. Reading File
Mr. Houk
Mr. Cservenyak, 3413
Mr. Bryson, G-232, GSA Bldg.
Docket File

FILE COPY
SURNAME:

Robertson
R. Johnson

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C. 600

FEB 20 1952

Mr. H. C. Wildner
Vice-President, National Lead Company
111 Broadway
New York, New York

Subject: Docket No. DMEA-2286 - Rutile
National Lead Company
Duval County, Florida
$42,449.90

Dear Mr. Wildner:

Transmitted herewith is copy of contract covering the subject exploration project which has been signed by this office for the Government with register number and effective date as shown.

Sincerely yours,

C. O. Mittendorf (fw)

Acting Administrator
Defense Minerals Exploration Administration

Enclosure

JTRobertson:gad
2/26/52
Copy to: Admin. Reading File
Docket File
Mr. Cservenyak, 3413
Mr. Bryson, G-232, GSA Bldg.
Field Team, Region VII
Mr. Houk

DEFENSE PRODUCTION ADMINISTRATION
WASHINGTON 25

OFFICE OF ADMINISTRATOR

FEB 4 1952

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

Dear Mr. Mittendorf:

Reference is made to your letter of January 31, 1952.

The Defense Production Administration approves the inclusion of the minerals rutile and brookite in the minerals exploration program.

Sincerely yours,

Manly Fleischmann
Administrator

cc: Mr. H. I. Young
Deputy Administrator
Defense Materials Procurement Agency
Washington 25, D. C.

FILE COPY
SURNAME:

140

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

January 25, 1952

Memorandum

To: J. L. Hofflund

From: C. J. Koontz

Subject: National Lead Company exploration contract -- Docket No. DMEA-2286, Contract No. IdmE-236

It is suggested that you look over the attached draft of the above contract very carefully, as I am not too much satisfied with it.

In returning it to the engineers, you will want to comment on the following:

1. Attachment of the requisite Landlord's Subordination Agreement.

2. Attachment of the maps called for by Exhibit "A".

3. In connection with "Equipment to be rented" set forth in Exhibit "A", there is a 2½ ton truck which will be rented for $10.00 which apparently is ~~the~~ a nominal rental for six months plus repairs to the truck at $2,500.00. Obviously, the amount of repairs exceeds 50% of the value of the truck and since its rental value is only nominal it may even approach 100% of its value.

Under "Equipment to be furnished by the Operator" there is a 2½ ton truck with a rental allowance of $454.50 for the 6 months' period of the project plus repairs of $806.16. The repairs and rental allowance constitute approximately 30% of the value of the truck. I question the soundness of these allowances.

This project is to explore for rutile, a commodity not covered by MO-5.

C. J. Koontz N.S R&R

Attachment

CJKoontz/bjl

Copy to: Repts. & Records
C. J. Koontz
Chron.

NATIONAL LEAD COMPANY
MINING DEPARTMENT
111 BROADWAY
NEW YORK 6, N.Y.

ALLAN R. REISER
ASSISTANT MANAGER

January 8, 1952.

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

Attention: Non-Metallics Division

Subject: D.M.E.A. - 2286

RE: Exploration Loan
R. G. and A. C. Skinner Lands,
Duval County, Florida

Dear Sirs:

In accord with your recent request, we are enclosing herewith:

1. Subordination Agreement between United States Government acting through the Department of the Interior, Defense Minerals Exploration Administration, and National Lead Company, concerning the R. G. and A. C. Skinner lands, Duval County, Florida, held under option by National Lead Company and as described in our original application to you dated December 11, 1951.

2. Revised Estimated Costs for the project:

   (a) Drilling and Automotive Equipment owned by National Lead Company computed at a depreciation rate of 1/60th of the value per month. For equipment leased from the Humphreys Gold Corporation of Jacksonville, Florida, the charge will amount to approximately $2500.

   (b) Expendable Supplies, Fixtures and Improvements. These are the same as other items included in the original application but have been grouped under this title as a matter of clarity.

   (c) Estimated Operating Costs.

      i. Detail of labor costs beyond that previously furnished is shown in this section.

U.S. Department of the Interior
Defense Minerals Exploration Administration January 8, 1952.

ii. Repairs to equipment have been based on average costs per week for the same drilling equipment from records obtained between the months of July 30, 1951 and December 23, 1951 from work performance on a similar job.

iii. Supplies have been based upon the same experience as ii.

3. Estimated Metallurgical Testing Expense.

The cost for this work has been estimated by Mr. J.H.Carpenter, our consulting metallurgist, and is only for preliminary investigation of the mineral contained (i.e., Rutile, Monazite, Zircon and Ilmenite) within the heavy mineral portion of the ore horizon.

We wish to draw to your attention that our experience in this type of work has shown that the procedures of drilling, sampling and the preliminary metallurgical testing as outlined in this application will allow us to evaluate this property within a reasonable limit of accuracy. However, detailed metallurgical testing, based upon a representative bulk sample of a minimum of 50 tons of material, will be required before final cost estimates and final project evaluation can be determined.

The cost of this bulk sampling and metallurgical testing can be expected to amount to between $15,000/$20,000. in addition to the amounts stated in this Exploration Proposal. However, the amount for bulk sample testing has not been included in the enclosed application, as it is our understanding that the prime objective of this project is to determine whether or not economic minerals lie within the boundaries of the R. G. and A. C. Skinner tracts.

The revised estimated costs amount to $47,932.16, as compared with our original estimate of $52,720.00. This reduction has come about mainly through our use of lesser depreciation credits for drilling and automotive equipment as requested by Mr. Houk of your organization. Further, some of the estimated costs contained herein are at variance with those previously submitted in our original proposal. These have been checked thoroughly and are the best available at this time. While we are sure that the total amount listed in this application is adequate for the job intended, we do

U.S. Department of the Interior
Defense Minerals Exploration Administration

January 8, 1952

wish you to know that it may be possible some of the individual accounts may be exceeded, since these are only our best estimates at this time.

Yours very truly,

A. R. Reiser

ARR:ACB
Encs. listed
3 cc this letter

1/9/52

A. E. HUMPHREYS, PRESIDENT
I. B. HUMPHREYS, VICE-PRESIDENT
JAY P. WOOD, VICE-PRESIDENT

JUDSON S. HUBBARD
VICE-PRESIDENT AND TREASURER
WILLIAM C. BENTON
VICE-PRESIDENT AND COUNSEL

HUMPHREYS GOLD CORPORATION
RUTILE-ILMENITE-ZIRCON DIVISION
P. O. BOX 5492
JACKSONVILLE 7, FLORIDA

January 8, 1952

Mr. Allen Reiser
Assistant Manager
Mining Department
National Lead Company
One Eleven Broadway
New York 6, N. Y.

Dear Sir:

This letter is in reply to your request for an estimate of probable cost of rehabilitation of our drilling rig leased to you under agreement dated November 30, 1951, when your drilling campaign is concluded.

Based on past experience operating this drilling rig and similar drilling rigs and your current costs for repairs to the two drills you are using in Duval County, we estimate repairs and replacements may cost $2,500.00 to return the drill to same condition it was when it was leased to you.

Yours very truly,

HUMPHREYS GOLD CORPORATION

Jay P. Wood

Jay P. Wood

JPW:nm

PCO ENGINEERING AND MANUFACTURING
Consulting Engineers - Manufacturers - Designers
JACKSONVILLE 6, FLORIDA

ADDRESS MAIL TO
P. O. Box 3272

PLANT LOCATION
HAINES AT 32ND STREET

January 8, 1952

Mr. J. C. Meade
Mining Department
National Lead Department
111 Broadway
New York 6, N. Y.

Dear Mr. Meade: Re: Mineral Evaluation A. C. Skinner Tract

The following are the estimated costs for producing rutile, ilmenite, zircon, and monazite products from the ore taken in the test-hole sampling of the Skinner Tract. These figures are based on a sample of approximately 2000 pounds made up by combining two of the fractions of the material from the test-holes. Based on an estimated average of 7% heavy minerals, this would give approximately 140 pounds of material for dry separation. End products would be approximately half of this amount, or a total of 70 pounds.

Laboratory Wet Separations,	4 days @	$ 50.00	$ 200.00
Laboratory Dry Separations,	4 days @	50.00	200.00
Reports and calculations,	3 days @	50.00	150.00
Consulting time,	1 day @	100.00	100.00
			$ 650.00
Materials, extras, and so forth	@	10%	65.00
		Total	$ 715.00

We estimate the accuracy of the above work to be within 10% which will give a reasonably accurate evaluation of the commercial mineral values present in these properties. It should be noted that these results will not be sufficient for a plant design or a detailed cost

estimate of the plant required to produce these products. Before a preliminary plant design and cost estimate can be obtained, it is suggested that a sample of not less than 50 tons be treated and the end products evaluated. Before actual plant construction is started, it is also suggested that a pilot plant test run should be made.

With kindest regards,

Very truly yours,
CARPCO ENGINEERING AND MANUFACTURING

J. H. Carpenter

J. Hall Carpenter

JHC/e

3. (a) It is planned to drill cross sections (East-West) on 300 feet centers (See Exhibit D) The cross sections will be one-quarter of a mile apart. This will require 470 holes. The depth of each hole is estimated at 50 feet or less. A total of approximately 23,500 feet of hole will be drilled by this procedure. A field laboratory and office will be installed close to the site of drilling. All of the sands obtained from drilling will be retained for test purposes. One third of the sample obtained will be used for heavy mineral determination by standard heavy liquid separation procedures. Two thirds of the sample will be retained for determination of individual mineral composition of the total heavy mineral. All of the above work will be performed by our own crews with the exception of electro-magnetic separations and determinations of individual mineral content of the heavy minerals, which will be done by our consultant, Mr. J. H. Carpenter, of Jacksonville, Florida.

The costs of the above described work are estimated as follows:

Equipment

Quantity	Item	Value	Depreciation Allowed*
1	2½ ton 6x6 Truck, complete with C. Kirk Hillman "Airplane Placer Drill" and accessories	$4,545	$454.50
1	2½ ton Halftrack Truck, equipped with C. Kirk Hillman "Airplane Placer Drill" and accessories	6,300	2500.00**
1	1½ ton Stake Truck	1,600	160.00
		Total	$3114.50

Expendable Supplies, Fixtures and Improvements

Amount	Item	Cost
300 ft.	Sullivan EX flush coupled casing	$450
300 ft.	1½" double strength black pipe	300
	Valves, couplings	450
	Laboratory (for determinations of heavy mineral grade, screen analysis, etc.	1500
	Laboratory supplies: (Bromoform, etc., for start of operations)	200
		$2900

*On N.L.Co. owned equipment, allowable depreciation taken at 1/60 of value per month.

**Equipment not owned by N.L.Co. - Leased from Humphreys Gold Corp., Jacksonville, Fla.

Estimated Operating Costs

Supervision	Per Wk.	Expenses Per Mo.	Expenses 6 Month Period
Superintendent			
Salary		$417	$2500.00
Rental of house		100	600.00
Personal expenses (Misc. travel at 7¢ per mi., meals, hotel bills, etc.		250	1500.00
		$767	$4600.00
Foreman	$102	-	2652.00
			$7252.00
Workman's Compensation ($2500 and $2652) x $0.0396			204.02
State and Federal Unemployment Insurance ($2500 and $2652) x $0.0300			154.46
Total Supervision			$7610.58

Labor	Hrs. p/Wk.	No.in Crew	Rate p/Hr.	Wages p/Wk.	Wages 6 Mo. Period
Driller*	40	4	$1.265	$302.40	$7862.40
Driller Helper	40	8	1.10	352.00	9152.00
Lab. Technician	40	1	1.265	50.60	1315.60
Lab. Helper	40	1	1.10	44.00	1144.00
					$19,474.00
Workman's Compensation ($19,474 x $0.0396)					771.17
State and Federal Unemployment Insurance ($19,474 x $0.0300)					584.22
Total Labor					$20,829.39
Total Supervision and Labor					$28,439.97

Repairs to Equipment		
2 Drill Rigs **	$127.16	$3306.16
Supplies**		
Gas and Oil	99.00	2574.00
Laboratory	100.18	2604.68
Misc. Supplies	95.60	2485.60
Total Supplies	$294.78	$7664.28
Total Estimated Operating Costs		$39,410.41

* $25 per week allowed for living expenses for drillers imported for this project.

**Based on average cost per wk. of half track drill rig from July 30, 1951 to Dec. 23, 1951.

3(a) Contd.

Estimated Metallurgical Testing Expenses*

Concentrating Composite Sample 8 Laboratory Man-days x 50.00/man-day	$400
Preparing Report 3 man-days x $50/man-day	150
Consultant (Mr. J. H. Carpenter) 1 day @ $100/day	100
Miscellaneous (for chemicals, supplies, etc.)	65
Total Metallurgical Testing Expenses	$715

Expenses of Optioning Skinner Tracts

	Acres	Option Rate Per Acre	Expenses Optioning 6 Mo. Period
A. C. Skinner	1382	$0.50	$691.00
R. G. Skinner	2202½	.50	1101.25
			$1792.25
Grand Total for the Project			$47,932.16

* Cost estimate of Mr. J. Hall Carpenter, Jacksonville, Florida (See attached letter.)

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

January 2, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 3 1952

Memorandum

To: L. G. Houk
Nonmetallics Branch
D. M. E. A.

From: Chief, Light Metals Branch

Subject: D. M. E. A. 2286 - Application for Aid for an Exploration Project for Rutile in Florida by the National Lead Company

The subject application appears to be feasible and in order. Preliminary drilling, indicating commercial concentrations of rutile, is encouraging.

Rutile is currently in short supply; present domestic production and imports are insufficient to meet demands for welding rod coatings, alloys, ceramics and titanium metal.

Approval of the application is justified from the standpoint of the strategic importance of rutile.

Rutile does not appear on MO 5 as amended on July 17, 1951, however, I understand that you are adding it to the list of commodities for which the Government will loan 90 percent of the cost.

H. W. St. Clair

H. W. St. Clair

Attachment

DEFENSE MATERIALS PROCUREMENT AGENCY
WASHINGTON 25, D. C.

DEC 20 1951

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

Subject: Rutile - Exploration Proposal
Titanium Alloy Mfg. Division

Dear Mr. Mittendorf:

We understand that the proposal to undertake exploration on Rutile deposits in Florida referred to in the attached letter from Titanium Alloy Manufacturing Division is being submitted to the Defense Minerals Exploration Administration as an exploration project under MO-5.

No application received to date. 12/21/51

In view of the present urgent need to develop domestic sources of Rutile we would appreciate your prompt and favorable consideration of subject proposal.

Sincerely yours,

Howard I. Young
Deputy Administrator

Attachment

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 21 1951

TITANIUM ALLOY MANUFACTURING DIVISION
NATIONAL LEAD COMPANY
111 BROADWAY
NEW YORK 6, N.Y.

December 6, 1951

Mr. James A. Barr, Sr.
Chief Industrial Minerals Branch
Defence Minerals Administration
General Services Administration
Washington, D. C.

Dear Mr. Barr:

In several conversations with your office, we have referred to a property known as the Skinner Property, situated southwest of Jacksonville, Florida, as a possible source for rutile.

The rutile which we could expect to produce from this tract would, in our opinion, be suitable both for use in welding rod coatings or as a source for Titanium Metal.

We have taken an option on this tract, with a view to making it available as a reserve for rutile, ilmenite and zircon for future use. However, in view of the critical situation relating to rutile for welding rod purposes, we feel that we should lay before you the proposition of taking steps to develop this tract immediately, rather than conserving it for the future.

To do this we would propose to institute a drilling program to determine the extent of the ore-bearing bodies, their depth, and other mining problems needing investigation.

The Skinner Tract comprises some 3585 acres, as shown by a map of the locality attached hereto and marked Exhibit A.

The cost of the drilling program and the necessary beneficiation tests which we recommend we estimate at some $50,000 to $60,000. The type of drilling program is more particularly described in the pages attached and marked Exhibit B, as is the procedure for the beneficiation tests.

In addition to drilling, we would propose work by our Research Department on the use of the particular minerals that could be produced by this property, because of the fact that our experience shows differences in minerals that are produced by one property as compared with another, even throgh their chemical composition may be substantially the same.

In addition to rutile, this property would be expected to produce Ilmenite and Zircon.

We believe there is a market for the Ilmenite and that the quantities we would expect to produce contemporaneously with the Rutile, could be sold at the market price prevailing at that time.

We would expect that a certain amount of Zircon, likewise, would be produced, but in view of the fact that there are large tonnages of zircon now available and in excess of any present or prospective market, we cannot say that the zircon as produced can be sold immediately, and it might well result in its being stored.

The drilling program contemplated above can be started on receipt of a letter of intent from your office, agreeing to reimburse us for the expenses in connection therewith, as may be appropriate.

We believe the drilling program can be completed within six months. Within a relatively short thereafter, we would be in a position to advise you of the type of plant and the cost of plant which we believe would operate the property satisfactorily and on an economic basis.

Very truly yours,

Winthrop Sargent
Manager

WS:avw
attachments

E X H I B I T "B"
f o r
Letter of December 6, 1951 to Mr. Barr, re Skinner Property

The type of drilling equipment proposed to be used on this project is that commonly referred to as a sand jet drill. This equipment is mobile and one drill rig will be moundted on a standard type half-track vehicle and the other on a standard Army-type 6 x 6 truck.

The holes will be drilled on 300 feet centers and along the courses outlined on the map attached hereto and marked Exhibit "A". Samples of all materials obtained will be transported to the field laboratory where they will be split into three portions. One of these portions will be for determination of heavy mineral content and the other two will be retained for beneficiation and metallurgical tests.

It is intended that the first drilling on the tracts of land described heretofore will be spaced on 1/2 mile centers. At the completion of this drilling, fill-in lines will be drilled on 1/4 mile sections for the purpose of obtaining more detailed information regarding exact characteristics of the orebody, its mineral content and other data pertaining to mining problems.

IN REPLY REFER TO:

G-MD-TDM

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

December 21, 1951

Memorandum

To: Lawrence G. Houk, Nonmetallics Division, Defense Minerals Exploration Administration

From: Robert P. Bryson, Nonmetallics Commodity Committee

Subject: National Lead Company application (DMEA-2286) for aid in exploration for rutile in Florida

Reference is made to the subject application for a grant in aid for exploring certain mineral lands located approximately 10 miles southeast of Jacksonville in Duval County, Florida. This exploration is for the purpose of determining the rutile content of the heavy mineral beach sand deposits existing on the properties by means of core drilling and subsequent laboratory tests. Work is to be begun immediately upon approval of a suitable contract with the Government.

It is believed that this exploration project is justified from a geological standpoint for the following reasons:

a) The experience in the immediate area shows that suitable deposits of heavy minerals occur which can be commercially operated, presumably at a profit.

b) Preliminary drilling in the area between the present site of operations and the properties under option has developed satisfactory mineralization at least on a qualitative basis.

c) Additional drilling initiated on the optioned properties shows a continuation of this mineralization demonstrating that potentially these tracts are capable of furnishing adequate reserves.

d) The exploration plan as outlined, relative to drilling methods, distance between cross-sections and spacing of holes appears to be intelligently conceived to fit local conditions as found by similar past experience, and these data have been adequately documented.

e) Subject Company is already well established in this business, has a firm reputation in the trade, and will doubtless be a competitive factor in the industry for a long-term period.

Therefore the project is endorsed as offering reasonably good possibilities of increasing the applicant's reserves in this area.

T. D. Murphy

for Robert P. Bryson

DMEA-2286

Cservenyak.

NATIONAL LEAD COMPANY

111 BROADWAY

NEW YORK 6, N.Y.

H. T. WARSHOW
VICE PRESIDENT

December 11, 1951

The Defense Minerals Administration
Department of The Interior
Washington 25, D. C.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 12 1951

Re: Exploration for Rutile in Florida

Dear Sirs:

Please find attached an Application for Aid for An Exploration Project pursuant to Mineral Order No. 5, under Defense Production Act for 1950.

This Application is on Form MF-103 and includes the following:

1. Exhibit A - General Map of the area.
2. Exhibit B - Contract with A. C. Skinner
3. Exhibit C - Contract with R. G. Skinner
4. Exhibit D - Map showing the proposed exploration drilling
5. Exhibit E - Map showing holes drilled, indicating existence of definite mineralization.
6. Letter dated December 4, 1951 relating to small changes made in the contracts of A. C. Skinner and R. G. Skinner (Exhibits B & C).

We shall be pleased to furnish any further information that you may require.

Yours very truly,

Vice President

HTW:ACB

Encs.
4 copies this letter

STOCKTON, WHATLEY, DAVIN & COMPANY
GENERAL REAL ESTATE
MORTGAGES-INSURANCE-RENTALS
CORNER BAY AND LAURA STREETS
JACKSONVILLE 2, FLORIDA

SALES DEPARTMENT
JOSH L. WATSON
VICE PRESIDENT

12/6/51

December 4, 1951

Mr. Gloyd M. Wiles, Mgr.
Mining Department
National Lead Company
111 Broadway
New York, N.Y.

Re: Option #19 - R. G. Skinner
Option #20 - A. C. Skinner

Dear Mr. Wiles:

The executed options #19 and #20 as per caption, have been delivered to Mr. R. G. Skinner and to Mr. A. C. Skinner, as per enclosed copies.

Your attention invited to copy of letter to Mr. R. G. Skinner, paragraph 2. He has changed and initialled the turpentine lease cancellation schedule from 6¢ to 5¢ for the 3rd year and 5¢ to 3¢ for the 4th year, on his copy of the option. It is suggested that you make note of this change on your copy of the option.

We have advanced for the account of National Lead Company, in accordance with your telegram, the amount of $1,101.25 which has been paid to Mr. R. G. Skinner, and $691.00 which has been paid to Mr. A. C. Skinner.

With the writer's kindest personal regards.

Yours cordially,

Geo. W. Semmes

Geo. W. Semmes

GWS:mgh
cc:
Mr. James R. Stockton
Mr. H. Plant Osborne

We owe 1792.25

EXPLORATION

Subject: DMEA-2286
Re: Exploration Loan
R. G. & A. C. Skinner Lands

H. T. Warshow, Vice President
National Lead Company
111 Broadway
New York 6, N. Y.

My dear Mr. Warshow:

This will acknowledge receipt of your application dated December 11, 1951 for a loan under the Defense Production Act of 1950.

Your application was assigned Docket Number DMEA-2286 and referred to the Non-Metallics Division.

Kindly refer to DMEA-2286 in any future correspondence relating to your application.

Sincerely yours,

ROBERT E. ADAMS

Robert E. Adams
Acting Administrative Officer

7862

Jacksonville, Florida

November 30, 1951

National Lead Company
111 Broadway
New York, N. Y.

Lease of Drill Rig and Equipment

Gentlemen:

In accordance with the agreement reached by your Mr. Reiser with our Mr. Wood on behalf of their respective Companies as to your possession and use of our Drill Rig for your use in drilling on lands in Duval and St. Johns Counties, the undersigned, for and in consideration of the sum of Ten Dollars ($10.00) and other good and valuable considerations paid to us, receipt of which we hereby acknowledge, does hereby lease to you its Drill Rig mounted on half track truck; Humphreys Gold Corporation Vehicle No. 17, Motor No. 40009, Serial M-3-A-10509 W and accessory and incidental drilling equipment as listed on attached inventory, all now in good repair and condition, to be used by you in exploratory drilling in the Counties of Duval and St. Johns, Florida, upon and subject to the terms, provisions and agreements as follows:

1. The term of the lease shall be six months beginning November 30, 1951, and ending May 31, 1952;

2. In consideration of said lease National Lead Company, herein called Lessee, covenants and agrees as follows:

(a) That it assumes and shall have full responsibility for the possession, use, care, maintenance and operation of the Rig and equipment hereby leased, both on and off the highway, until said Rig and equipment are returned to us at the original point of delivery;

(b) It will safely keep and carefully use, repair, maintain and operate said property at its expense, risk and liability and return same to the undersigned in as good condition as the same now is, reasonable wear and tear excepted;

(c) It will procure, furnish and pay for insurance on said property in such amounts and for such coverages assuring and/or indemnifying Humphreys Gold Corporation from and against liability to person and property as may be adequate and reasonable, and will, in every event, be liable for all loss, injury and/or damage to person and/or property arising out of or in connection with its possession, use, repair, maintenance, transporting and operation of said Rig and equipment until the termination of this lease and the return of said property to the Lessor as provided herein, and will indemnify and hold the Lessor harmless from and against any and all claim made against the Lessor by reason of such possession, use, repair, maintenance, transporting and

National Lead Company November 30, 1951

operation of said Rig and equipment.

The Lessor has executed two copies of this lease. Upon your approval and acceptance of this lease, you will please, execute both copies and return one to us.

Very truly yours,

HUMPHREYS GOLD CORPORATION

By Jay P. Wood
Its Vice-President

In the presence of:

L. E. Jackson

In the presence of:

Gloyd M. Wiles

The foregoing lease approved and executed by the undersigned Lessee.

NATIONAL LEAD COMPANY

By [illegible]
Its Vice-President

1500 Form 16-J-5-49

Part January & February - 1952

FLORIDA

NATIONAL LEAD COMPANY

TITANIUM DIVISION

Sayreville, New Jersey

Extended by .....

Checked by .....

Approved by .....

PAYROLL FOR WEEK ENDING ....., 19....

Clock No.	NAME	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat	Sun.	Total Hours	Rate per Hour	Total Earned	Tax Classification	Withholding Tax	F.O.A.B. Ins.	Unemp. Ins.	Retire Ann.	H. & A. Ins.	Life Ins.	Hosp.	T.F.C.U.	Bonds	Misc.	Union Dues	Amount Paid	Check No.
		14	15	16	17	18	19	20																	
1-19-52	Elbert F. Shiver	8	10	8	8	8.5		4.13 43.75 / W 00 42.5		1.10	48.13	2	4.60	.72										42.81	142
"	James R. Strickland	8	10	8	8	8		3.80 / 50.60 43. / 42		1.265	54.40	4	.60	.82										52.98	143
"	Omer F. Strickland	8	8	8	8.5	8		.95 40.75 / 50.60 40.5		1.265	51.55	3	2.60	.77										48.18	136
"	Earl West	9.5	9	8	8.5	8		4.75 44.5 / W 00 43		1.10	48.95	3	2.00	.73										46.22	144
											1.19.94		41.30	6.05										48.19	
		J 21	A 22	N 23	24	25	26	R 27																	
1-26-52	James G. Aldridge	8	8	8	8	8			40	1.10	44.00	1	6.30	.66										37.04	151
"	Otha C. Beavers	8	8	8	8	8			40	1.10	44.00	4	—	.66								Correction for w/e 1-26-52 + .73		44.07	152
"	Wilbur R. Brack	8	8	8	8	8			40	1.10	44.00	1	6.30	.66		January - 1952								37.04	153
"	Oris O. Brittle	0	0	8	8	8.5			24.5	1.10	26.95	2	2.00	.40										26.35	154
"	Joe V. Fraser	8	8	8	8	8.5		.95 40.75 / 50.60 40.5		1.265	51.55	2	5.20	.77										45.58	155
"	William A. Lane	0	8	8	8	8			32	1.10	35.20	3	—	.53										34.67	156
"	Lawrence D. Morgan	8	8	8	8	8			40	1.265	50.60	2	5.00	.76										44.84	157
"	Elbert F. Shiver	8	8.5	8.5	8.5	9		4.13 43.75 / W 00 42.5		1.10	48.13	2	4.60	.73										42.80	158
"	James R. Strickland	8	8	8	8	8			40	1.265	50.60	4	—	.76										49.84	159
"	Omer F. Strickland	8	12.5	11	9	8		16.13 52.75 / 50.60 48.5		1.265	66.73	3	5.70	1.00										60.03	160
"	Earl West	8	12.5	11	9	8		14.03 52.75 / W 00 48.5		1.10	58.03	3	4.00	.87					10.80			.33		53.16	161
											2.166.14		37.30 / 163.20	7.50 / 3.50										47.54 / 1960.27	
		JANUARY 28	29	30	31	FEBRUARY 1	2	3																	
2-3-52	James G. Aldridge	8	8	8	8	8			40	1.10	44.00	1	6.30	.66										37.04	173
"	Otha C. Beavers	8	9	8	8	8		4.00 41.5 / 1.65 41		1.10	45.65	4	—	.68										44.97	174
"	Wilbur R. Brack	8.5	8.5	8.5	8.5	8.5		4.00 43.75 / 4.13 42.5		1.10	48.13	1	7.10	.72										40.31	175
"	Oris O. Brittle	8	0	8	8	8			32	1.10	35.20	2	2.00	.53										32.67	176
"	Joe V. Fraser	8	8	8	8	8			40	1.265	50.60	2	5.00	.76		February - 1952			4.50					40.34	177
"	William A. Lane	8	8	8	8	8			40	1.10	44.00	3	1.20	.66										42.14	178
"	Lawrence D. Morgan	8	8	8	8	8			40	1.265	50.60	2	5.00	.76										44.84	179
"	Elbert F. Shiver	8	8	8	8	8			40	1.10	44.00	2	3.80	.66										39.54	180
"	James R. Strickland	8	8	8	8	8			40	1.265	50.60	4	—	.76					4.50					45.34	181
"	Omer F. Strickland	10	8	10	10	8		5.60 49 / 11.39 46		1.265	61.99	3	4.50	.93					1.80					54.76	182
"	Earl West	10	8	10	10	8		4.00 49 / 9.90 46		1.10	53.90	3	3.00	.81					10.80	Cross Refer to Wilmington				50.09	183
											5.48.67		37.70	7.73										47.04	

2500 Form 10-J-8-49

February - 1952
Florida
Part of March - 1952

NATIONAL LEAD COMPANY

TITANIUM DIVISION

Sayreville, New Jersey

PAYROLL FOR WEEK ENDING ....., 19....

Extended by .....
Checked by .....
Approved by .....

Clock No.	NAME	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat	Sun.	Total Hours	Rate per Hour	Total Earned	Tax Classification	Withholding Tax	F.O.A.B. Ins.	Unemp. Ins.	Retire Ann.	H. & A. Ins.	Life Ins.	Hosp.	T.F.C.U.	Bonds	Misc.	Union Dues	Amount Paid	Check No.
		F	E	B	R	U	A	R	Y																
~~4543~~	TOTALS	4	5	6	7	8	9	10					3790	793					10.80	P.P.M.&C.				47704	
2-9-52	James G. Aldridge	8	8	8	8	8			40	1.10	44 00	1	63	66										3704	191
								44 00	52.75																
	Otha G. Beavers	8	8.5	8	8	16		14 03	48.5	1.10	58 03	4	140	87										5576	192
	Wilbur R. Brack	8.5	8	8	8	8		44 00	40.75																
								83	40.5	1.10	44 83	1	630	67										3786	193
	Oris O. Brittle	8	8	8	0	0			24	1.10	26 40	2	20	40										2580	194
	Joe V. Fraser	8	8	8	8	8			40	1.265	50 60	2	500	76										4484	195
	William A. Lane	8	8	8	0	0			24	1.10	26 40	3	—	40										2600	196
	Lawrence D. Morgan	8	8	8	8	8			40	1.265	50 60	2	500	76										4484	197
	Elbert F. Shiver	8	8.5	8.5	8.5	8.5		44.00	43																
								330	42	1.10	47 30	2	440	71										4219	199
	James R. Strickland	8	8	8	8	8			40	1.265	50 60	4	—	76										4984	200
	Omer F. Strickland	8	9.5	9	8	8		50 60	43.75																
								474	42.5	1.265	55 34	3	340	83										5111	201
	Earl West	8	9.5	9	8	8		44 00	43.75																
								417	42.50	1.10	48 13	3	200	73										4540	202
		11	12	13	14	15	16	17			504 23		3400	775										46069	
2-13-52	Otha C. Beavers	8	8						16.0	1.10	17 60	4	—	26										1734	204
	Wilbur R. Brack	8	8						16.0	1.10	17 60	1	90	26										1644	205
	Elbert F. Shiver	8	16						24.0	1.10	26 40	2	20	40										2580	206
	Earl West	8	8						16.0	1.10	17 60	3	—	26										1734	207
2-16-52	James G. Aldridge	8	8	8	8	8			40	1.10	~~44 00~~	2	380	66					2.00	Will pay in March				37 54 ~~3754~~	209
	James R. Strickland	8	8	0	8	0			24	1.265	30 36	4	—	45										2991	210
	Omer F. Strickland	8	8	8	8	8			40	1.265	50 60	3	240	76										4744	211
		1.265	1.10					45 32	33.5	1.10	35 20														
	Lawrence D. Morgan	8	8	8.5	8.5	8.5		248	8	1.265	10 12	2	440	72										4268	212
			1.265		1.10				16	1.10	17 60														
	Joe V. Fraser	8	8	8	8	8			24	1.265	30 36	2	440	72										4284	213
		18	19	20	21	22	23	24			494 76	2	1610	449					2.00	LATHA				27 33	
2-18-52	James G. Aldridge	8							8.0	1.10	8 80	2	—	13										867	218
								51 60	41.5																
2-23-52	James R. Strickland	8	9	8	8	8		130	41.0	1.265	52 50	4	20	79										5151	220
	Omer F. Strickland	8	8	8	8	8			40.0	1.265	50 60	3	240	76										4744	221
								44 00	41.5																
	Joe V. Fraser	8	9	8	8	8		165	41.0	1.10	45 65	2	320	68										4177	222
	Lawrence D. Morgan	8.5	9.5	8.5	0	8.5			35.0	1.10	38 50	2	260	57										3533	223
											11 60		8 40	2 93										18 72	
		25	26	27	28	29	30	31			154 97		964	279					18.80	2.00 KAM.CW				1394 77	
3-2-52	James R. Strickland	8	8	8	8	8			40.0	1.265	50 60	4	—	76					4.50					4534	232
	Omer F. Strickland	8	8	8	8	8			40.0	1.265	50 60	3	240	76					1.80					4564	233
	Joe V. Fraser	8	8	8	8	8			40.0	1.10	44 00	2	380	66					4.50					3504	234
	Lawrence D. Morgan	8	8	8	8	8			40.0	1.10	44 00	2	380	66										3954	235
											199 20		1000	284					10.80					16556	

MARCH