UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE

Terminated [X] Cancelled [ ] Withdrawn [ ] DMEA No. 2289

This is the official contract file of a project closed without certification. It contains all official records of the project arranged in this manner:

Left Side

Certificate of Audit (Final).

Interim Audit(s).

✓ Report of Review.

✓ Closing Letter

Termination Notice or Agreement.

Recision Notice.

Assignment of Contract.

Contract Amendments (latest on top).

✓ Contract with all exhibits and annexes.

Owner's Consent to Lien.

✓ Subordination Agreement.

✓ Leases and assignments of leases.

✓ Application and attachments.

Schedule of Collections.

✓ Operator's monthly reports and all attachments (latest on top).

Right Side

Project summary.

✓ Work completed analysis.

All other material is filed in chronological order with correspondence including the following reports as checked:

✓ Final Field Team Report. (Tab)

✓ Operator's Final Report.

✓ Interim Reports.

✓ On-Site Exam Report(s). (Tab)

Settlement Sheets.

If additional folders are required because of volume of records, show folder numbers and contents below:

Maps in folder number ____

Operator's Monthly Reports in folder number ____

Reviewer's Initials and Date wk 3/11/57

10390

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
FILED
SEP 18 1953

DEFENSE MINERALS EXPLORATION ADMINISTRATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF REVIEW

I have reviewed the Monthly Reports of:

Graham Development Corporation,
a corporation duly organized and
existing under and by virtue of
the laws of the State of Florida
1000 Lincoln Road
Miami Beach 39, Florida

pertaining to Exploration Project Contract No. Idm-5467, Docket No. DMEA-2289, for the period December 18, 1952 to June 8, 1953, covering a project of exploration for tungsten.

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

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

The contract provides for payment by the Government on the basis of agreed estimated costs of units of work actually performed.

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

Total cost as billed by contractor	$15,540.00
Exceptions	none
Total accepted cost	$15,540.00

The contract calls for a 75 per cent participation of exploration expenses by the United States Government. Therefore, payment to the contractor by the Government in the amount of Eleven Thousand, Six Hundred Fifty-Five and 0/100 Dollars.

$11,655.00

is considered valid and proper.

George Mavor
George Mavor
Auditor

July 15, 1953

400

FILE COPY
SURNAME:

Rutledge
Martin
Gilmore
Burin
Chandler
FE Johnson

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

OCT - 5 1953

Mr. Charles R. Graham, President
Graham Development Corporation
1000 Lincoln Road
Miami Beach 39, Florida

Re: Docket No. DMEA 2289 - Tungsten
Black Horse Tungsten mine
White Pine County, Nevada
Exploration Contract No. Idm-E467

Dear Mr. Graham:

This is with reference to the subject exploration project contract between Graham Development Corporation and the Government.

The final audit of the contract expenditures and the final reports of the Operator and the Field Team have been received and accepted by this Administration. Of the total amount of $17,120.00 approved under the contract, the sum of $15,540.00 was expended, 75 percent of which, or $11,655.00, represented the Government's share. The contract was on the unit cost basis and, therefore, there were no unused supplies, material, or equipment to be disposed of for the joint account of the Operator and the Government. The exploration work was completed in substantial compliance with the contract.

Because the results of the exploration were unfavorable, it is not our intention to make a certification of discovery or development which would create a lien against the subject property. We are, therefore, closing our books and records with respect to this project. Your attention is called, however, to Article 5(d) of the contract which requires the Operator to "keep and preserve said records and accounts for at least 3 years after the completion of the project or the termination of this contract."

Your interest in the exploration program of the Defense Minerals Exploration Administration and your willingness to participate therein are appreciated.

Sincerely yours,

Frank E. Johnson

ACTING Administrator

cc: Docket
FT, Reg. 3
Adm. Read. File
Code 400
Code 800
R. W. Geehan, USBM
Mary Miller, USGS
Operating Committee

FARutledge/ls
9/30/53

R.C.G. 10-5-53

MF-200 (A)
(February 1952)

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 17 1952

DOCKET NO. DMEA 2289

COMMODITY Tungsten

Government's Copy

IDM-E 467

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

EXPLORATION PROJECT CONTRACT[1]
(Short Form)

IT IS AGREED this 18th day of December, 1952, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and[2] Graham Development Corporation, 1000 Lincoln Road Miami Beach 39, Florida, a corporation duly organized and existing under and by virtue of the laws of the State of Florida

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 Nevada, County of White Pine, described as follows:[3] The two unpatented mining claims known as the Gold King No. 1 and the Gold King No. 2, in Sec. 24; T. 15 N.; R. 68 E. in the Black Horse Mining District. These two claims are recorded respectively in Book 123 at page 428 and in Book 123 pg. 428 in the office of the Recorder, at Ely, Nevada.
the Operator represents and undertakes:[4]

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

(*b*) That the Operator is a lessee, in possession and entitled to possession, and ~~the lease or a copy is attached.~~ Landlord's Subordination Agreement

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 60 days from the date of this contract shall commence work on a project of exploration for[5] Tungsten

in or upon the described land; and shall bring the project to completion within a period of nine (9) months from the date of this contract. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided. The work shall be performed by the Operator or by independent contractor or contractors efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for workmen's compensation and employers' liability insurance, with suitable and adequate equipment, materials, and labor, to bring the project to completion within the time fixed. The Government shall have the right to enter and observe and inspect the work at all reasonable times, and the Operator shall provide the Government with all available means for doing so. The Government may consult with and advise the Operator on all phases of the work.

ARTICLE 4. *Costs of the project.*—The agreed, estimated costs of performing the work, expressed in terms of units of work to be performed (per foot of drifting, per foot of drilling, per cubic yard of material to be moved, etc.) are set forth in Exhibit "A," attached hereto. The Government will pay 75 percent of these agreed, estimated costs, as they accrue, for units of work actually performed that conform with the description or specifications for the work set forth in this contract, in an aggregate total amount not in excess of $12,840.00 which is 75 percent of $17,120.00 the agreed, estimated total cost of the project in which the Government will participate: *Provided,* That until the Operator's final report and final accounting have been rendered to the Government and any final check or auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract. The Government may, as it sees fit, make payments direct to the Operator's independent contractors, if any, for the account of the Operator, rather than to the Operator.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

ARTICLE 9. *Changes and added provisions* _____

Executed in sextuplicate the day and year first above written.

Graham Development Corporation
(Operator)

By Charles R. Graham

THE UNITED STATES OF AMERICA

By O. Mitchell

Administrator, Defense Minerals Exploration Administration

I, A. H. SEILER, certify that I am the secretary of the corporation named as Operator herein; that Charles R. Graham, President, 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.

A. H. Seiler [CORPORATE SEAL]

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

GRAHAM DEVELOPMENT CORPORATION
EXPLORATION PROJECT CONTRACT
DOCKET NO. DMEA-2289

EXHIBIT "A"

Description of the Work

The exploration work on this project is indicated on the map attached hereto and made a part hereof entitled "Figure 1 - Longitudinal section of the Black Horse Mine, White Pine County, Nevada."

Time Schedule: 0 - 6 months

1. Sink the present Black Horse shaft an additional 72 feet to reach the 200 foot level and provide for a sump.

2. Cut a shaft station at the 200 foot level.

3. Drift and/or crosscut a total of 250 feet on the 200 foot level to explore the vein on the hanging wall side of the Black Horse fault and to determine at least its presence or absence on the footwall side of the fault.

Estimated Costs of the Project

72 feet of shaft sinking @ $100.00/foot	$7,200.00	
Shaft station 1/	490.00	
250 feet of drifting and/or crosscutting @ $37.00/ft.	9,250.00	
45 Tungsten analyses @ $4.00/analysis	180.00	
Total Estimated Cost of Project		$17,120.00
Government Participation @ 75%		$12,840.00

1/ The unit here is the entire job.

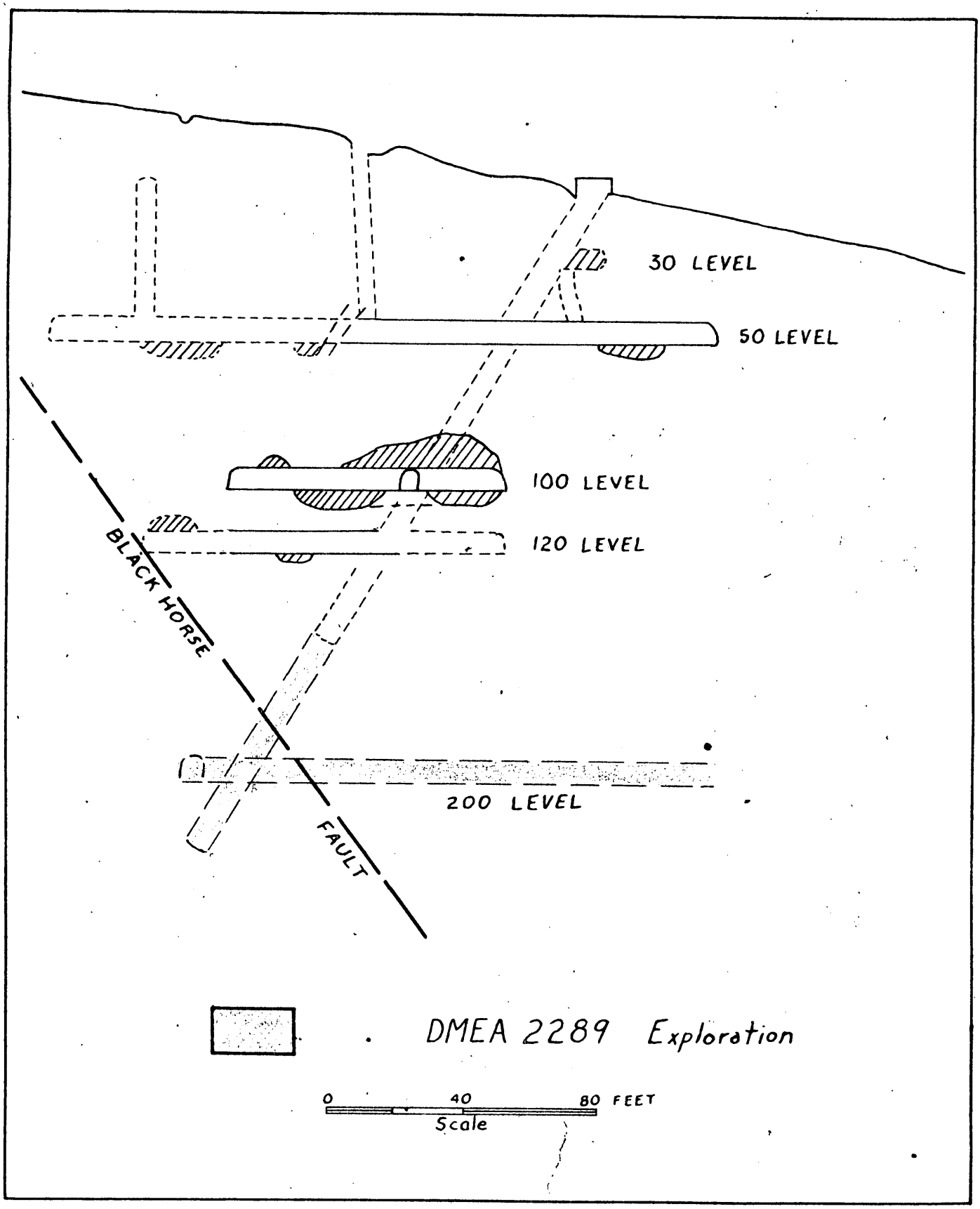

FIG. 1 LONGITUDINAL SECTION OF THE BLACK HORSE MINE
WHITE PINE COUNTY, NEVADA

MF-202

LANDLORD'S SUBORDINATION AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

WHEREAS, the undersigned is the owner in fee simple of that certain parcel of ground in the county of White Pine, State of Nevada, described in a certain Exploration Project Contract dated _____, 195__, between GRAHAM DEVELOPMENT CORPORATION, the Lessee of said property, and the United States of America;

NOW, THEREFORE, the undersigned, as Lessor of said property under lease dated Sept. 1, 1949, does by these presents subordinate all of his right, title, and interest under the provisions of said lease to the right, title, and interest of the United States of America under the provisions of said Exploration Project Contract, and agrees that the lien and claim of the United States of America under the provisions of said contract shall be prior to the undersigned's rights to rentals or royalties under the terms of said lease; and

The undersigned further agrees that if said leasehold interest should be surrendered or if said lease should terminate at any time prior to the expiration of the rights of the United States of America under said Exploration Project Contract, the undersigned shall assume and does hereby assume all of the obligations of the Lessee under said Exploration Project Contract to make repayment to the United States of America according to the terms of said contract; and

The undersigned agrees to commit no act, nor assert any claim under judicial process or otherwise that may contravene or conflict with the prior lien and claim of the United States of America under the provisions of said Exploration Project Contract.

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

Dated this 13th day of March, 1952

Clarence Peterson

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 21 1952

U. S. GOVERNMENT PRINTING OFFICE 16-64562-1

Wayne Gonder

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-2289
Metal or Mineral
Date Received 12-14-51
Amount $
Participation (Government %)

Graham Development Corporation
1000 Lincoln Road
Miami Beach 39, Fla.

Name and address of applicant

Date ~~Nov~~ December 11, 1951

If you have already filed MF-100, give date filed none, type of assistance requested DMA Loan for exploration,

DMA Docket Number (if available)

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 14 1951

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.

Graham Development Corporation
(Name of company)

By Charles R. Graham
(Signature of authorized official)
Charles R, Graham

December 11, 1951
(Date)

President
(Title)

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

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

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39 FLORIDA

TELEPHONE 5-0921

Supplement to Form MF-103 Sheet # 1

1. (a) The properties are unpatented mining claims known as Gold King No. 1 and Gold King No. 2. It is situated in the Black Horse Mining District in White Pine County State of Nevada. The claims are of maximum size, being about 600 ft. by 1500 ft. They lie in Range 68 E, Township 15 N., Section 24.

(b) Copy of lease and purchase option attached.

(c) Exploration is to be conducted in what is known as the Black Horse Vein or Shaft, located on the unpatented mining claims, Gold King No. 1 and No. 2. The shaft is situated on the centerline of the Gold King # 2 claim at about 230 feet from the East end line. The distance from the shaft to the N. E. corner of Gold King No. 2 claim is approximately 380 feet in an approximate N. 38° direction.

There are no liens or encumbrances against the property.

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39 FLORIDA

TELEPHONE 5-0921

Supplement to Form MF-103, Sheet # 2.

2. (a) The mineral to be found is known as Scheelite, a Calcium Tungstate.

(b) A fissure-type vein cuts through a limestone formation which contains Scheelite, Calcite and Quartz. Limestone is the dominant rock, although quartzite and shale lie in the near vicinity. Evidence of Tungsten in the form of Scheelite is readily seen with the Black Light. Flat stringers of narrow width but heavily mineralized with Scheelite, show outside the main Fissure zones. These are dipping towards the main vein and could possibly connect at lower levels.

The mineralization of the Scheelite shows improvement with depth. The mineral Scheelite bearing veins are much wider at the 100 foot level than at the 50 foot level, and would appear to provide an enrichment where they should meet with the main fissure vein.

The former operators, the Gilded Age Mining Company, took out 528 units of WO_3. The concentrate averaged better than 60% WO_3. This represented about 0.6 % mill return on the ore as mined. This was such an improvement in grade of ore from that found on the upper level that it would appear that valuable ores will be found at a greater depth. The fissure vein shows heavy faulting in places, but where some of the origonal vein structure shows, the vein is very rich. The showing of Tungsten at the present depth is sufficient to warrant exploration of this deposit at a still lower depth. There is no indication that the ore-shoot does not continue below the present operation.

Thorough pipe sampling from the tailing pile at the mill showed assays of 0.75% WO_3 which added to the 0.60% WO_3 recovered would make the WO_3 contents of 1.35% in the 880 tons of ore previously mined.

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39 FLORIDA

TELEPHONE 5-0921

Supplement to Form MF-103, Sheet # 3.

3. (a) It is proposed to sink the present Black Horse shaft an additional 200 feet. This would give a depth of about 300 feet along the incline. At the 200 foot level a station would be cut and about 200 ft. of drifting along the fissure would be done, also about 150 feet of exploratory cross-cutting.

After this the shaft would be continued another 100 feet and a similar program of drifting and cross-cutting followed. If ore was found at the first 100 foot operation, it could be removed if desired. The estimated cost would be $ 56,200.

(b) The project would be started immediately, as machinery has already been set up, and some exploratory work has been done. It is estimated that it would require about 10 months to complete the project.

Supplement to Form MF-103, Sheet # 5.

5. (a) A complete set of mining equipment and machinery is available from the present owner, the Graham Development Corporation. A list of some of the equipment available is below:

1 - Gardner-Denver, WBG, 315 Cu. Ft. Compressor powered by D-11000 Cat.
1 - Gardner-Denver, HKL, 9 H.P. Air Tugger
1 - Head Frame
1 - Compressor House
1 - Hoist House
130 Ft. - 16# track in shaft
130 Ft. - Pipe service lines in shaft
1 - ½ ton skip
1 - 3 ton Fairbanks-Morse duplex pump
1 - #35 Ingersol-Rand sump pump
1 - 1½ ton Mack dump truck
1 - 3/4 ton Mack pick-up truck
1 - Gardner-Denver double drum slusher hoist
200 Ft. Surfact track
2 - Mine cars
4 jackhammers, 1 drifter drill, 2 stopers, and various underground and shop tools.

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39 FLORIDA

TELEPHONE 5-0921

Supplement to Form MF-103, Sheet # 6.

6. The additional facilities required would be:

Two trailers for residence at the property:	$ 3,000.
Additional pumping equipment (if necessary)	2,500.
Longer hoisting rope	200.

It is possible that the two trailers could be rented. See Sheet # 7.

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39 FLORIDA

TELEPHONE 5-0921

Supplement to Form MF-103, Sheet # 7.

7. (a) Equipment to be rented:

Two trailers for residence at the property if available. $ 1,000.

(b) Equipment to be purchased:

Pumping equipment (if necessary due to water seepage and if present equipment will not handle it $ 2,500.
Longer hoisting rope 200.
Two trailers for residence at property if they cannot be rented. 3,000.
These items would be salvage at the end of the operation so that depreciation is not applicable.

(c) Equipment owned by the Graham Development Corporation and supplied to the project as listes on sheet # 5 would be leased to the project at $ 400. per month with no depreciation on same charged to the project:

Estimated cost for estimated 10 months $ 4,000.

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39 FLORIDA

TELEPHONE 5-0921

Supplement to Form MF-103, Sheet # 8.

8. Labor and direct supervision required for project:

1 superintendant at $ 500 per month
2 Hoist men at $ 350 per month each
4 miners at $ 375 per month each

Industrial insurance, unemployment compensation, and social security would be additional.

Estimated payroll per month		$ 2,700
Ins. & Taxes	15%	405
	Monthly payroll	3,105
	ten months	31,050

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39 FLORIDA

TELEPHONE 5-0921

Supplement to Form MF-103, Sheet # 9.

9. Operating two shifts of three men each for ten months, the total estimated cost of the project would be as follows:

Labor	$ 31,050.
Supplies and Assays	8,000.
Equipment repairs	1,250.
Engineering	2,700.
Accounting, Ins., Etc.	2,500.
Equipment	7,700.
Contingencies	3,000.
	$ 56,200.

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39 FLORIDA
TELEPHONE 5-0921

Supplement to Form MF-103, Sheet # 10.

10. (a) The Graham Development Corporation is able and willing to invest at least $ 14, 050. additional in this project. This is 25% of the estimated cost of the entire exploration project.

Through November 30, 1951, the company has spent about $ 14,800 on the development of this property without government aid. However, we cannot undertake the balance of the project without government help, because expansion of our oil business will require a large amount of our working capital. Therefore we plan to abandon the mine unless we can get a DMA loan for 75% of the balance of the work on the mine.

(b) This amount is sufficient to pay the share of the Graham Development Corporation in accordance with current regulations on government participation.

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39 FLORIDA

TELEPHONE 5-0921

supplement to Form MF-103, Sheet # 11

11. The Graham Developmemt Corporation has a gold mining camp just 17 miles from the mine. This camp has housing facilities, water, electricity, and a mill for processing tungsten ores. If commercial ore is found, these facilities can be put into operation at a very low cost as compared to a mining operation in some other location.

An audited financial statement of the Graham Development Corporation is included herewith.

Form MF-100
(May 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

GENERAL TECHNICAL DATA FOR USE UNDER THE DEFENSE PRODUCTION ACT OF 1950

NOT TO BE FILLED IN BY APPLICANT

Docket No. DMEA-2389

Date received 12-14-51

Graham Development Corporation
1000 Lincoln Road
Miami Beach 39, Florida

Name and address of applicant

Date Dec. 11, 1951

INSTRUCTIONS

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

GENERAL TECHNICAL DATA

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

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

   Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity.
3. For each operation listed above supply the following:
   (*a*) Distance and direction from nearest town and shipping point.
   (*b*) Mining district.
   (*c*) Township, Section, Range.
   (*d*) County, State.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
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4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated.
   (*b*) Are you operating this property as:
   - ☐ Owner.
   - ☒ Lessee.
   - ☐ Contractor.
5. Number of years in production _____

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

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

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

Name and Address (a)	Official Title (If officer is also director indicate by "D") (b)	Total of Annual Salary, Commissions, Bonuses, Etc., Received From Applicant and Affiliates During Last Fiscal Year (c)	Estimated Net Worth Outside of Interest in Applicant (d)	Number of Shares Held in Applicant Corporation: Common (e)	Number of Shares Held in Applicant Corporation: Preferred (f)	Life Insurance Carried for Benefit of Applicant: Amount (g)	Life Insurance Carried for Benefit of Applicant: Net Cash Surrender Value After Loans (h)
Charles R. Graham	Pres. (D)	8,000	200000	3,650	none	none	none
Joseph G. Graham	V. P. (D)	6,000	200000	3,150	none	none	none
Arthur H. Geller	Sec/Tr. (D)	8,000	60,000	1020	none	none	none
Joseph B. Graham	Director	none	1,000000	19,300	none	none	none
Joel S. Graham	Director	none	200000	2300	none	none	none
Roy B. Hargenau	Vice-Pres	1,200	50000	none	none	none	none
Robert J. Hyatt	Vice-Pres	6,000	200000	none	none	none	none
	Total	29,200	x x x x x	30,220	none	x x x x x	x x x x x

If more lines are needed continue on separate sheet.

9. Capital Stock Issues:

For Corporate Applicants

Item	Authorized (a)	Outstanding (b)	Par Value (c)	Number of Shares Outstanding (d)	Dividend Rate Last Paid* (e)
Common stock	$ 50,000	$ 36,000	$ 1.00	36,000	3.40 Dec 1950
Preferred stock	$ none	$ none	$ none	none	none

*Indicate period covered.

10. Production:

Item	Kind of Product (a)	1948 Total (b)	1949 Total (c)	1950 Total (d)	Present Average Monthly (e)
1. Quantity of product mined or quarried (Short, long, metric tons; barrels; pounds; etc.)	Crude Oil-Bbl.	22,700	40,700	42,000	3,500
	Gold-Oz.	none	none	499	none
2. Quantity of product processed (specify unit of measure and type of process)	none	none	none	none	none
3. Quantity and grade of product sold or shipped (specify units of measure)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

11. Do you contemplate a change in the present average monthly rate of production? If so, state estimated maximum monthly production and basis of change. No production, work is exploratory

12. Ore or Mineral Reserves:

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

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39 FLORIDA

TELEPHONE 5-0921

Supplement to Form MF-100, Sheet # 1.

1. (a) None. Exploration for tungsten minerals.

(b) None.

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39 FLORIDA

TELEPHONE 5-0921

Supplement to Form MF-100, Sheet # 2.

2. The mine is known as the Black Horse Mine. It is now being operated by the Graham Development Corporation. During World War II it was operated under the same name by the Gilded Age Mining Company. Extent of workings include the following:

(a) Linear feet of shafts: 130 feet at 60° slope.

(b) Linear feet of drifts and cross-cuts: 735 Feet

(c) Linear feet of tunnels and adits: none

(d) Linear feet of mine openings: 111 feet of raises.

The mine is not flooded, although there is a seepage of water at the 100 foot level which can be handled by pumping. Estimated flow is about 25 gallons per minute.

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39 FLORIDA

TELEPHONE 5-0921

Supplement to Form MF-100, Sheet # 3.

3. (a) The distance to the nearest shipping point, which is Ely, Nevada, is about 54 miles. The property is in a S. E. direction from Ely.

(b) The claims are in the Black Horse Mining District

(c) Township 15 North, Range 68 East, Section 24.

(d) White Pine County, Nevada.

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39 FLORIDA

TELEPHONE 5-0921

Supplement to Form MF-100, Sheet # 4.

4. (a) The property is now being explored by Graham Development Corporation.

(b) The Graham Development Corporation holds a lease and purchase option on the property.

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39 FLORIDA

TELEPHONE 5-0921

5.

Supplement to Form MF-100, Sheet # 5.

5. The property is not in production. It is estimated that it could be in production in about 8 months.

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39 FLORIDA

TELEPHONE 5-0921

Supplement to Form MF-100, Sheet # 6.

6. (a) The operator of this project is the Graham Development Corporation. The corporation is owned by one of the Graham families which was associated with the Graham Paige Motors Corporation prior to 1945.

The principal business of the corporation is production of crude oil in southern Indiana. In 1949, the corporation acquired the assets and personnel of the Gilded Age Mining Company in Nevada, which company operated gold and tungsten mines during the period from 1936 to 1949.

The Graham Development plans to return to gold mining at the end of the present emergency.

(b) The property is in the charge of a mine superintendant who has had 25 years of mining experience in Nevada, Oregon and Utah. He has a B.S. degree in Geological Engineering from the University of Utah. From 1941 to 1949 he was mine superintendant of the Gilded Age mine near Osceola, Nevada.

A part time mining engineer is also employed. He holds a B.S. and an E.M. degree from the Michigan College of Mines. He opened up the Gilded Age Mine and managed it from 1936 to 1949. He has had considerable experience in this type of exploration and development work in Nevada and in Canada.

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39 FLORIDA

TELEPHONE 5-0921

Supplement to Form MF-100, Sheet # 7.

7. (a) This property was opened up in 1943 with a small shaft which was sunk to a depth of about 50 feet. Some cross-cutting and drifting was done by the Gilded Age Mining Company. This showed the presence of Scheelite, but in the upper areas the ore streaks were narrow and difficult to mine without taking out considerable waste rock.

It was decided to continue the shaft to a depth of 100 feet later in 1943. At this level the ore was much wider and richer, and the company took out, milled and shipped about 528 units of WO_3 which was better than a 60% grade concentrate. This concentrate was recovered in a small gravity mill and represented about 0.6% ore after milling. The mill was not adapted to any fine recovery, and it is estimated from an assay of the tailings that the heads must have run about 1.35%. The Gilded Age Mining Company held a metal reserve contract from the government for the production of tungsten. This contract was cancelled in 1944 so work was discontinued due to the drop in the price of tungsten.

(b) There is considerable evidence of tungsten minerals in the area in which this project is located. The most important one is the U. S. Tungsten mine which is 15 to 20 miles South of this property.

(c) None available.

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39 FLORIDA

TELEPHONE 5-0921

Supplement to Form MF-100, Sheet # 8.

8. (a) Names and addresses of the principal stockholders, officers and directors of the Graham Development Corporation are as follows:

Charles R. Graham, President
Joseph S. Graham, Vice President
Arthur H. Seiler, Sec./ Treasurer

Office # 206
1000 Lincoln Road
Miami Beach 39, Fla.

Joseph B. Graham, Director
Nell S. Graham, Director

606 E. Vantrees Street
Washington, Indiana

Roy E. Margenau, Vice President, Mining Division
646 University Place
Grosse Point 30, Michigan

Robert J. Hyatt, Vice President, Oil Division
1 N. E. 5th Street
Washington, Indiana

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39 FLORIDA

TELEPHONE 5-0921

Supplement to Form MF-100, Sheet # 9.

12. (a) The ore is in the form of Scheelite (Calcium Tungstate) contained in quartz and Calcite in a fissure vein which lies in limestone formation.

(b) (1) No assay plan is available, although from previous Gilded Age Mining Company operations, it is estimated that the ore taken out was about 1.35% WO_3.

(2) None.

(c) This is not a placer operation.

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39 FLORIDA

TELEPHONE 5-0921

Supplement to Form MF-100, Sheet # 10.

13. U. S. Highway # 6 passes within three miles of the property. This is a paved highway. There is a good gravel road for three miles to the property. U. S. Highway # 6 connects to the main highway # 93 to Ely, Nevada, so that the property is readily accessible for shipping supplies and hauling ore. There are housing facilities available at the Goody Ranch, a mining camp owned by the Graham Development Corporation, which is about 18 miles from the mine on U. S. # 6.

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39 FLORIDA

TELEPHONE 5-0921

Supplement to Form MF-100, Sheet # 11

14. Water supply: There is an inflow of water at the mine sufficient for all mining purposes. At the Goody Ranch there is sufficient water available from company owned wells for milling and personnel.

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39 FLORIDA

TELEPHONE 5-0921

Supplement to Form MF-100, Sheet # 12.

15. Power is obtained from a D-11000 Caterpillar Diesel Engine which drives a 315 Cu. Ft. Gardner Denver Air Compressor. Air from this unit supplies all the power required at the mine. Another similar unit is owned by the company and can be moved to the property if needed.

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39 FLORIDA

TELEPHONE 5-0921

Supplement to Form MF-100, Sheet # 13

16. Present employees at the mine:

1 superintendant
1 hoist operator
2 miners

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39 FLORIDA

TELEPHONE 5-0921

Supplement to Form MF-100, Sheet # 14

17. A full complement of mining equipment and facilities are available and in good condition. This equipment was purchased from the Gilded Age Mining Company which operated nearby to a depth of 1100 feet. A hoist house 10 feet by 14 feet and a compressor house 14 feet by 20 feet were recently constructed on the property.

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

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

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

TOTAL ORE OR MINERAL RESERVES

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

(*c*) If placer:

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

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

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

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

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

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

13. Access Roads:

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

14. Water Supply:

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

15. Power:

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

16. Labor:

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

17. Equipment and Facilities:

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

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

None

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.

Graham Development Corporation (Name of company)

By Charles R. Graham (Signature of authorized official)

Charles R. Graham, Pres.

December 11, 1951 (Date)

President (Title)

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

U. S. GOVERNMENT PRINTING OFFICE 16—63792-1

LEASE AND OPTION TO PURCHASE

THIS AGREEMENT, made and entered into this 1st day of September 1949, by and between Wayne L. Bender and Clarice Peterson, the party of the first part, and Graham Development Corporation, the party of the second part.

WITNESSETH: That the said party of the first part, for and in consideration of the rents, royalties, covenants and agreements hereinafter reserved and by the said parties of the second part, to be paid, kept and performed, does by these presents agree to lease, unto the parties of the second part, all of the following named and described Mining Property, situated in the Black Horse Mining District of White Pine County, Nevada, to wit:-

Gold King Mining Claim No. 1

Gold King Mining Claim No. 2

TO HAVE AND TO HOLD, unto said party of the second part for a term of two (2) years from and after the date of this instrument above written, unless sooner forfeited as determined. And in consideration of the said lease, the said party of the second part does covenant and agree with the said party of the first part as follows:

To do and perform the annual labor required by law upon said mining claim, commonly known as assessment work, each and every year during the life of this agreement and to prepare and file with the County Recorder of White Pine County, Nevada, for the recording thereof an affidavit of annual labor in the manner and form required by law. To perform, including the above assessment work, a minimum of one hundred eighty (180) eight (8) hours shifts each year of the life of this agreement.

To pay to the First party a payment of $100.00 upon the signing of this agreement. To pay to the First party a rental of thirty ($30.00) dollars every thirty days (30 days) after the beginning of this lease. To pay to the first party a royalty of ten percentum (10%) on the net value of all ores or mill products produced and sold after transportation and milling or smelter charges are deducted. However, in any month a royalty is payable, the amount of the rental of thirty ($30.00) dollars paid can be applied against such royalty payment.

To work and develop said Mining Claim in a manner necessary to good and economical mining with due regard to the safety, development and preservation of said demised premises as workable mines and to well and sufficiently timber said mines at all points where proper.

To protect said demised mining claims from liens of miners, laborers, mechanics and material men by posting thereon in the manner provided by law such notices and to make and file in the office of the County Recorder of White Pine County, Nevada, an affidavit of posting of such notice of non-liability in the manner provided by the law of Nevada.

To keep all workmen employed upon said mining claims insured under the provision of the Nevada Industrial Insurance Act as enforced and supervised by the Nevada Industrial Commission.

It is understood and agreed by the parties hereto that any and all payments made to first party by second parties under the term of the lease, such as initial payment, rents and royalties shall be applied to and made a part of the purchase payment of said mining claim as

hereinafter provided in the option of or to purchase said mining claim hereinafter granted unto the second party hereto.

Second party may terminate this agreement at any time upon thirty (30) days' notice in writing to first party at last knownaddress and upon such termination all further obligations of either part thereafter accruing under this agreement shall cease.

OPTION TO PURCHASE

The said party of the first part, for and consideration of the sum of One Dollar, lawful money of the United States of America to him in hand paid by the said party of the second part, the receipt whereof is acknowledged, hereby grants the party of the second part an Option to Purchase said Mining Claims at the price of Four Thousand Five Hundred Dollars ($4500.00) for the two claims, in case said second party should desire to purchase said claims. This option to purchase said Mining Claims shall be in full force during the life of the foregoing lease and in case said second party purchases said Mining Claims, then any and all sums paid first party by second party as initial payments, rents or royalties from ores shall be applied against the purchase price of said claims and deducted from the above purchase price.

Said first party agrees to and does warrant that each of said claims is the property of said first party free and clear of any liens, encumbrances or defects in title.

Upon expiration or cancellation of the above agreement, the parties of the second part shall have ninety (90) days in which to remove all equipment, buildings, tools, machinery supplies and other personal property whether attached to realty or not, which is property of the party of the second part and likewise shall have the same period of

time to remove, market, mill or otherwise dispose of any ore mined upon said premises and remaining in or upon said premises at the time of cancellation or expiration of this agreement.

Time is the essence of this agreement and in case said parties of the second part fail to perform and carry out any of the terms, conditions or covenants herein, the said parties of the first part may give the parties of the second part written notice of such failure to comply with the terms of this agreement and in case such parties of second part shall fail for a period of thirty (30) days from and after receipt of such written notice to comply with the terms of this agreement and to carry out and perform all matters mentioned in such notice of failure to perform, then in such case said parties of the first part may declare this agreement forfeited and cancelled and of no force and effect and may re-enter thereon and remove all persons from these premises.

IN WITNESS THEREOF THE SAID PARTIES HAVE HEREUNTO SET THEIR HAND AND SEAL THIS 1st day of September 1949.

Wayne D. Gonder (Parties of the
Wayne D. Gonder (First Part
Clarice Peterson (
Clarice Peterson (

Graham Development Corporation

By Joseph S. Graham
Vice-President

By A. N. Seiler
Secretary

Seal

AMENDMENT TO AGREEMENT DATE SEPTEMBER 1, 1949 BETWEEN CLARICE PETERSON AND WAYNE GONDER AS PARTIES OF FIRST PART AND GRAHAM DEVELOPMENT CORPORATION PARTY OF THE SECOND PART.

For and in consideration of the sum of $1.00 and other valuable considerations receipt of which is hereby acknowledged, we CLARICE PETERSON AND WAYNE GONDER, do hereby agree to amend the LEASE AND OPTION TO PURCHASE AGREEMENT for GOLD KING MINING CLAIM #1 and #2 dated September 1, 1949 between CLARICE PETERSON and WAYNE GONDER Parties of the First Part and GRAHAM DEVELOPMENT CORPORATION Party of the Second Part, to extend the terms of such LEASE AND OPTION TO PURCHASE AGREEMENT for an additional two years, such extension to be from September 1, 1951 to September 1, 1953.

In further consideration of such extension GRAHAM DEVELOPMENT CORPORATION Party of the Second Part, does hereby covenent and agrée to do and conform to the requirements of the extended LEASE AND OPTION TO PURCHASE for the extended period in the same manner as required in the original LEASE AND OPTION TO PURCHASE AGREEMENT.

Witness Genevieve Richardson Signed Clarice Peterson
Clarice Peterson

Witness Genevieve Richardson Signed Wayne Gonder
Wayne Gonder

Graham Development Corp.

By _____
VICE-PRESIDENT

Witness _____

Dated _____

ANNUAL REPORT

1950

GRAHAM DEVELOPMENT
CORPORATION

MIAMI BEACH, FLORIDA
WASHINGTON, INDIANA
ELY, NEVADA

ACCOUNTANTS' REPORT

Graham Development Corporation
Miami Beach, Florida

We have examined the balance sheet of Graham Development Corporation as of December 31, 1950, and the related statements of profit and loss and surplus for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying balance sheet and statements of profit and loss and surplus present fairly the financial position of Graham Development Corporation at December 31, 1950, and the results of its operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

ERNST & ERNST

Miami, Florida
February 22, 1951

OFFICERS

CHARLES R. GRAHAM
PRESIDENT

JOSEPH S. GRAHAM
EXECUTIVE VICE PRESIDENT

ROBERT J. HYATT
VICE PRESIDENT
OIL AND GAS DIVISION

ROY E. MARGENAU
VICE PRESIDENT
MINING DIVISION

ARTHUR H. SEILER
SECRETARY AND TREASURER

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39, FLORIDA

To the Stockholders:

There are presented in the accompanying statements the results of the operation of the company for the year ended December 31, 1950.

Gross income for the year was $234,-024.72, compared to $127,818.46 in the year 1949, and $85,567.89 in the year 1948. After provision for taxes and depreciation, net profit for the year was $27,816.64, equal to 73 cents per share, compared to $15,238.25, or 40 cents per share, in 1949.

During the year twenty-nine new wells were drilled by the Oil & Gas Division. Fourteen of these produced oil and fifteen were dry holes. Oil production was increased by 105% in dollar value compared to 1949, reflecting the policy of the company to re-invest a major portion of the oil income in new wells, in order to increase production.

Operating jointly with others, the Oil

AND LOSS AND SURPLUS

ENT CORPORATION

cember 31, 1950

.....		$193,399.38
.....		15,287.15
.....		11,640.63
.....		11,053.00
.....		2,515.00
.....		129.56
	TOTAL	$234,024.72
.....	$92,326.18	
.....	56,721.43	
.....	57,160.47	
.....	229.23	206,437.31
	NET PROFIT	$ 27,587.41
.....		9,586.69
		$ 37,174.10
.....		15,232.00
SURPLUS AT DECEMBER 31, 1950		$ 21,942.10

STATEMENT OF PROFIT

GRAHAM DEVELOPM

Year Ended De

Net sales .....
Oil well drilling contracts .....
Profit from sale of securities.....
Dividends received .....
Rental .....
Miscellaneous income .....

Deductions from income:
- Development expenses .....
- Production expenses .....
- Administrative and general expenses .....
- Taxes on income—estimated:
  - Federal normal income tax .....

Earned Surplus at January 1, 1950 .....

Cash dividends paid—$.40 a share .....

EARNED

NOTE—In accordance with the provision of the Internal Revenue Code, the Company has elected to charge to expense, and has included as a deduction from income, all drilling and development costs incurred during the year in the development of its oil properties.

& Gas Division discovered a new pool in Knox County, Indiana. The company owns a 50% interest in 240 acres in this area where four wells are currently producing oil for the company, and drilling activity is continuing.

At year's end the company had 4,748 acres leased for oil development. Oil is being produced from leases totaling 942 acres and the balance were held for future development.

Operations at the company's mining properties resulted in a net loss for the year. Some ore was produced, but deposits so far discovered have not been large enough to make continuous mining possible. Additional claims were acquired during the year and current plans call for continued limited operation.

The management gratefully acknowledges the loyalty and fine spirit of the company's employees.

For the Board of Directors,

CHARLES R. GRAHAM,
President.

March 1, 1951.

BALANCE SHEET

GRAHAM DEVELOPMENT CORPORATION

December 31, 1950

ASSETS

CASH			
Demand deposits		$147,682.13	
Office funds		450.00	$148,132.13
ACCOUNTS RECEIVABLE			
Trade accounts		$ 63,947.89	
Dividends		365.00	64,312.89
INVESTMENTS—at cost			
Marketable corporation stocks (aggregate quoted market prices $126,866.50)		$121,379.11	
Unlisted corporation stocks (market quotations not available)		206,117.50	327,496.61
OTHER ASSETS			
Real estate investments—at cost	$ 58,369.54		
Less allowances for depreciation	1,938.46	$ 56,431.08	
Advances—oil and gas development projects		3,998.97	
Leases and claims—oil and mining		2,800.00	
Deposits		151.80	63,381.85
PROPERTY AND EQUIPMENT—on the basis of cost			
Land		$ 2,500.00	
Buildings and equipment	$218,420.99		
Less allowances for depreciation	34,617.24	183,803.75	186,303.75
DEFERRED CHARGES			
Gold mine development cost—less amortization		$ 5,360.37	
Supplies inventories		2,064.42	
Prepaid insurance		909.76	
Organization expense		304.56	8,639.11
			$798,266.34

LIABILITIES

ACCOUNTS PAYABLE AND ACCRUED EXPENSES		
Trade accounts and accrued expenses	$ 12,547.88	
Pay roll taxes and taxes withheld from employees	1,947.13	
Federal taxes on income—estimated	229.23	14,724.24
CAPITAL STOCK AND SURPLUS		
Capital stock, par value $1.00 per share: Authorized 50,000 shares; issued and outstanding 38,080 shares	$ 38,080.00	
Capital surplus	723,520.00	
Earned surplus	21,942.10	783,542.10
		$798,266.34

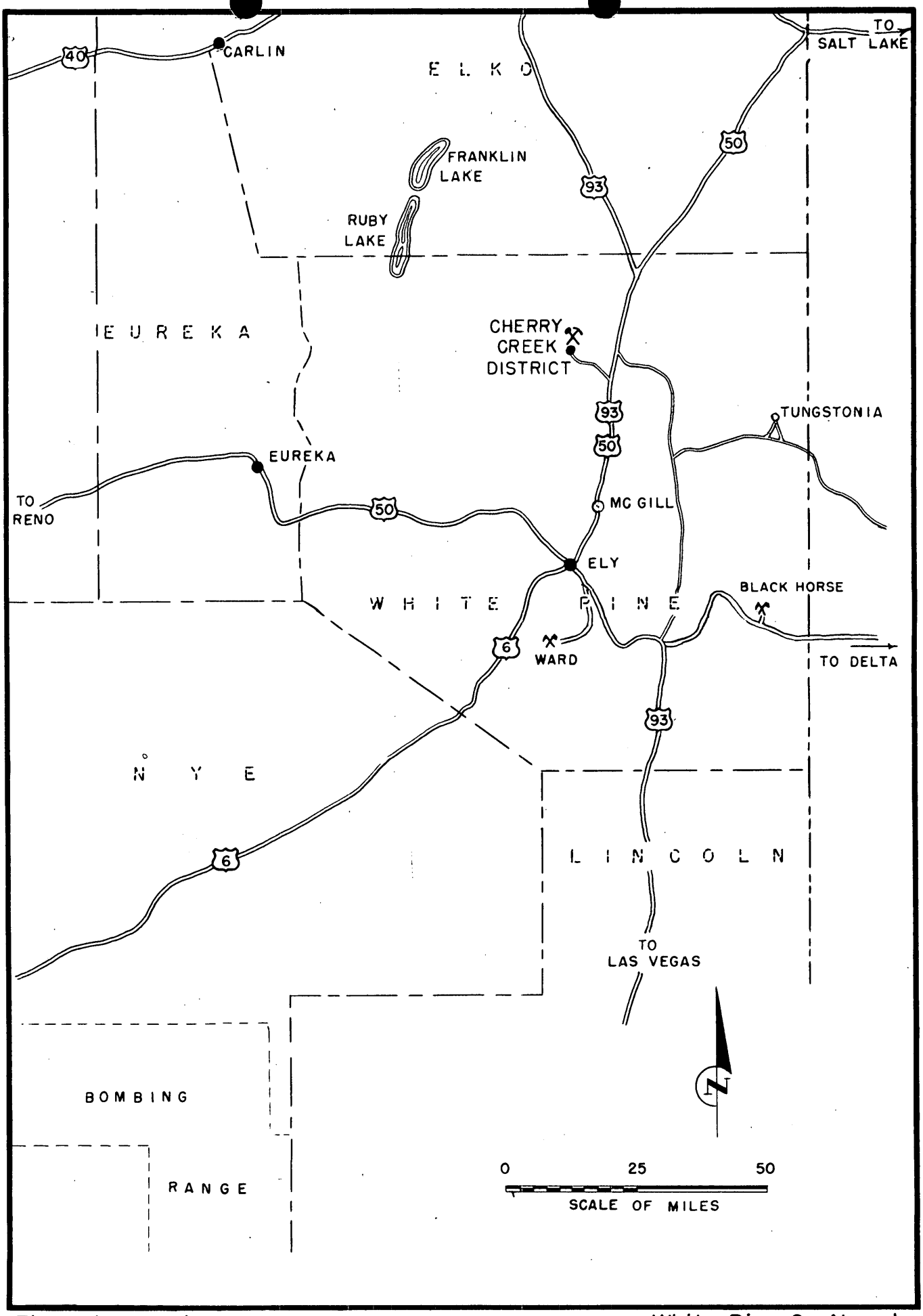


Figure 1- Location map, White Pine Co., Nevada

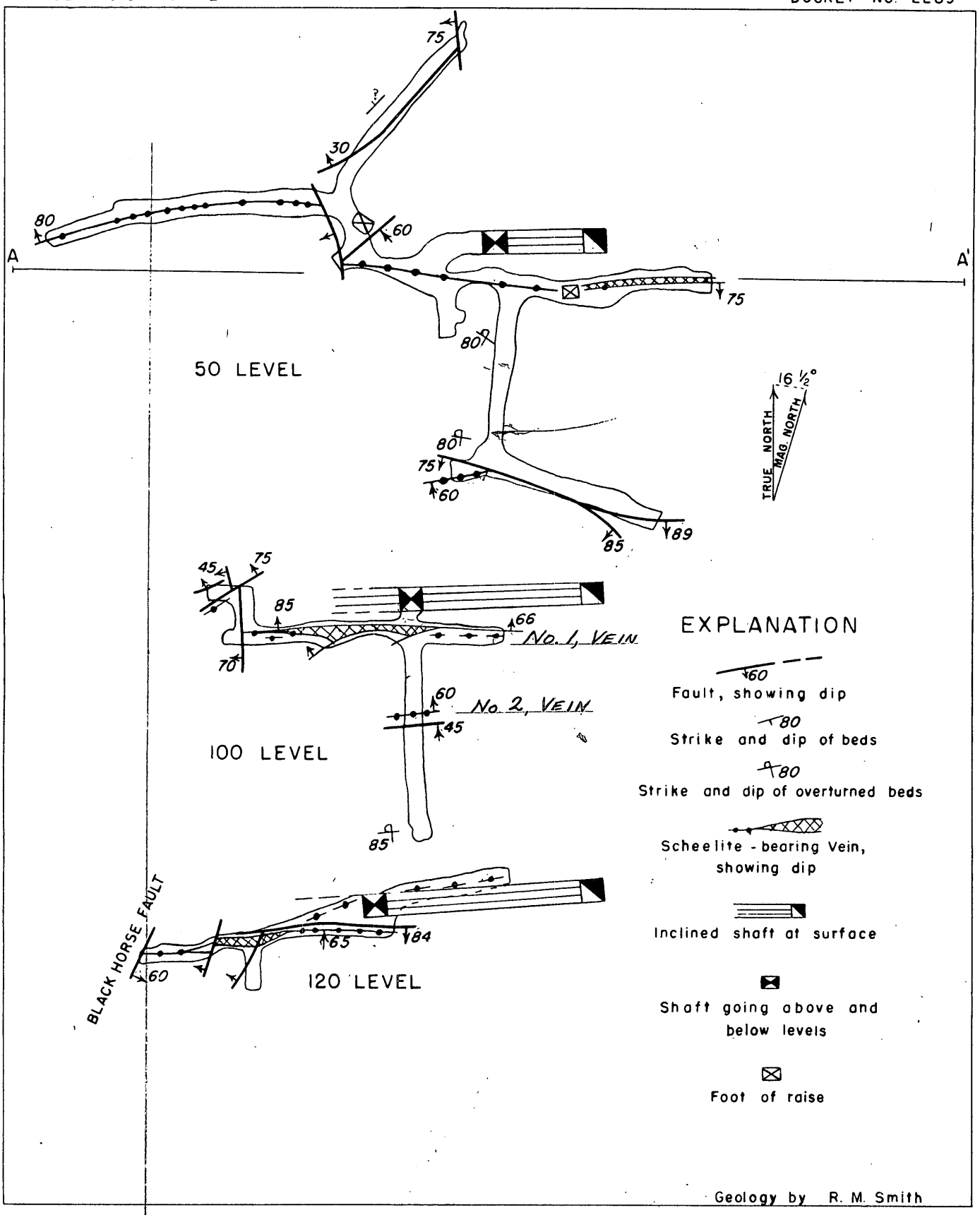


FIG. 2 GEOLOGIC LEVEL MAPS OF THE BLACK HORSE MINE

WHITE PINE COUNTY, NEVADA

0 40 80 FEET
Scale

700T @ 0.5
3507 @ 1 350
60
₹2 100

50 × 100 = 5000
6000
₹11,000

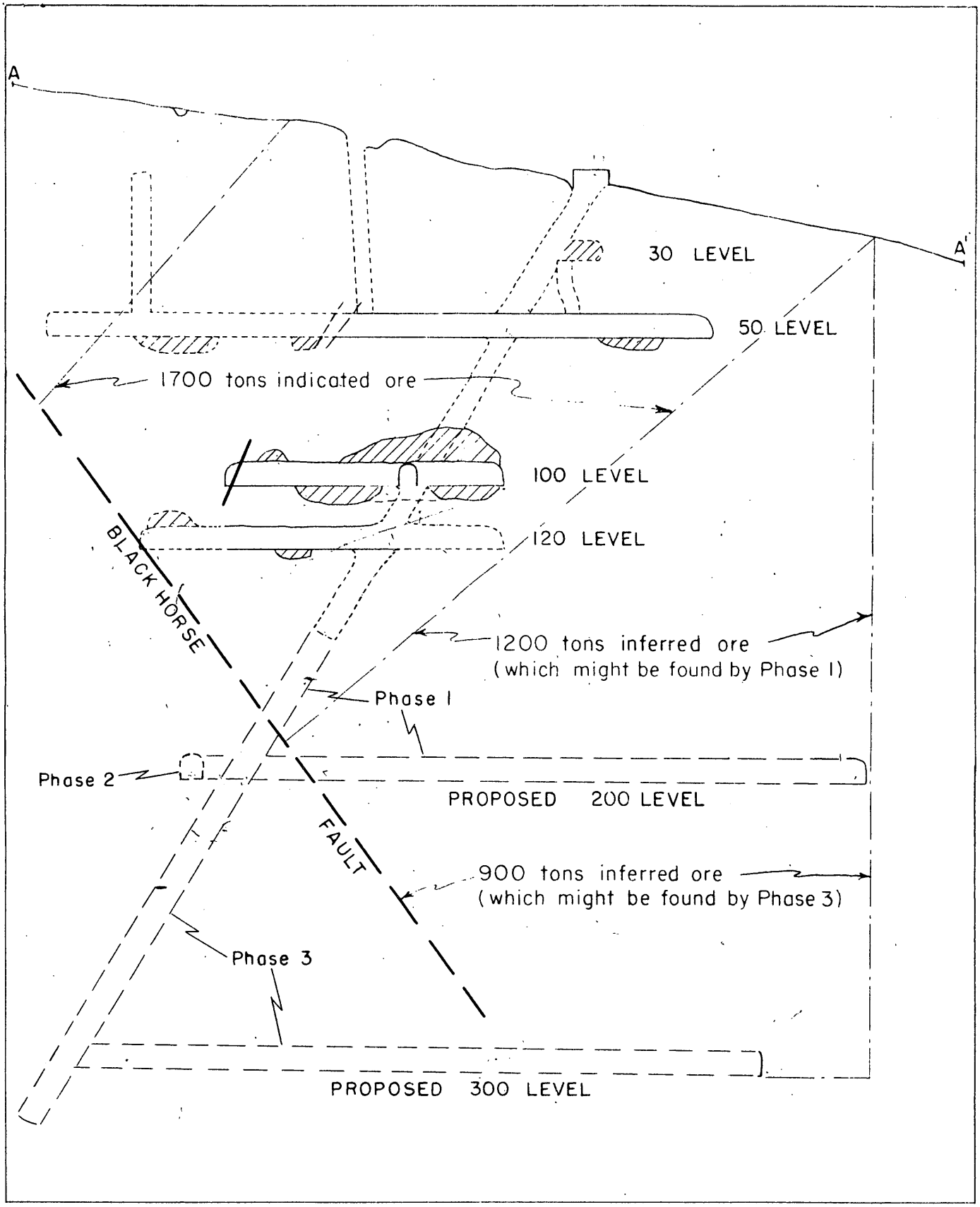


FIG. 3 LONGITUDINAL SECTION ALONG LINE A-A', OF THE BLACK HORSE MINE

WHITE PINE COUNTY, NEVADA

0 40 80 FEET
Scale

Form M[illegible] (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

ACCOUNTS JUN 30 1953

OPERATOR'S MONTHLY REPORT AND VOUCHER

May 1 through June 8

Month of _____, 1953 Docket No. DMEA 2209 Contract No. XC-1467
Operator's Name Graham Development Corporation Minerals Tungsten
Address 1000 Lincoln Road, Miami Beach 39, Florida
Contract Amount, $ 17,120 Government Participation: 75 % Amount, $ 12,840

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling						
Bulldozing						
Crosscutting Cutting station	-	400.	400.			
Drifting	1,721.	7,929.	9,650.	1,721.		
Sinking Shaft	-	5,500.	5,500.			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
Adjustment of underpayment on April MF-104 Bu. Vou. No. STADMEAA 43				892.50		
(8) Contingencies (specify):						
TOTALS	1,721.	13,829	15,550.			

I certify that the above bill is correct and just and that payment therefor has not been received.
Date June 15, 53 *Payee Graham Development Corporation
Per Charles R. Graham Title President

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

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

(Instructions on reverse)

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

$ 2183 25

Signature _____
(Authorized Certifying Officer)

Date SEP 11 1953 Vou. No. SF-DMEA-14

(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. Idn-E167 in accordance with the terms of the contract.

Signature R. C. Johnson Title Chief, Mining Div. Region III Date June 19, 1953.

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature H. C. Miller Title Executive Officer DMEA Field Team Region III Date June 25, 1953

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-R1A
(April 1952)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

ACCOUNTS JUN 30 1953

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of May 1 through June 8 195 3 Docket No. DMEA 2289 Contract No. 2dm-2467

Operator's Name Graham Development Corporation Minerals Tungsten

Address 1000 Lincoln Road, Miami Beach 39, Fla.

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	Ft.	1,721.	46.5	9,250.	250	69.70	250	37.00
Crosscutting								
Raising								
Shafts	Ft.	-	-	5,800.	58	100.00	72	100.00
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Cut Station	ea.	-	-	490.	1	490.	1	490.00
Total Distributed Costs		1,721		15,540.				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		1,721		15,540				

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 June 15, 1953 Operator Graham Development Corp.

Per Charles L. Graham Title President

Charles W. Graham

Remarks: Final Report- contract completed and unsuccessful to date. Balance of authorized shaft work is not necessary.

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

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205676

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39, FLORIDA

TELEPHONE 5-0921

June 15, 1953

NARRATIVE FOR THE PERIOD May 1 to June 8

Since there were only a few feet remaining to complete the contracted portion of the project, we are including a small amount of June work with the May report.

During the period the North Drift was extended 16½ feet and the East Drift was extended 30 feet. Total footage for the period was 46½ feet.

This completes the 250 feet of drifting and crosscutting authorized under the present contract. A final report with maps will be submitted before the end of the month.

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

Budget Bureau No. 42-R103
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of April, 1953 Docket No. DMEA 2289 Contract No. Idm-3467
Operator's Name Graham Development Corporation Minerals Tungsten
Address 1000 Lincoln Road, Miami Beach 39, Fla.
Contract Amount, $ 17,120 Government Participation: 75 % Amount, $ 12,840

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) ~~Independent~~ Short Form Contracts:						
Drilling						WSM
Bulldozing						
Cut Station Crosscutting		400.	400.			
Drifting	3,570.	3970.	7,540.			
Shaft Sinking		5000.	5,000.			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	3,570.	10,240.	13,010.			

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

Date May 13, 1953 *Payee Graham Development Corporation

Per Charles R. Graham Title President

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

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

(Instructions on reverse)

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

$1785 00

Signature Lloyd H. Sjolander
Authorized Certifying Officer
(Authorized Certifying Officer)

Date JUN 1 1953 Vou. No. SF-DMEA-43

(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. Ian-467 in accordance with the terms of the contract.

Signature A. C. Johnson Title Chief, Mining Div., Region III Date May 20, 1953.

A. C. Johnson

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature H. C. Miller Title Executive Officer DMEA Field Team Region III Date May 21, 1953

H. C. Miller

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of April 1953 Docket No. DMEA 2289 Contract No. Idm-E467
Operator's Name Graham Development Corporation Minerals Tungston
Address 1000 Lincoln Road, Miami Beach 39, Fla.

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting	Ft.	3570.	96.5	7,529.	203.5	68.	250	37.00
Crosscutting								
Raising								
Shafts	Ft.			5,800.	58.	188.	72	100.00
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Cut Station	ea.			490.	1	490.	1	490.00
TOTAL DISTRIBUTED COSTS		3570.		13,819.				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		3570.		13,819.				

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

Date May 13, 1953 Operator Graham Development Corp.

Per Charles R. Graham Title President

Charles R. Graham

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)

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

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39, FLORIDA

TELEPHONE 5-0921

May 13, 1953

Reference: Docket DMEA 2289
Contract Idm-E467

NARRATIVE FOR APRIL 1953

During April 113 man shifts were worked underground. The 200 foot level west drift was extended 39½ feet, the north drift was extended 14½ feet, the east drift was extended 26 feet, and the south drift was extended 16½ feet. The total amount of drifting during the month was 96½ feet.

The vein was intersected by the west drift and followed for a distance of twenty five feet. It averaged twenty inches in width and carried a trace of scheelite for the first fifteen feet, but lost the scheelite mineralization in the last ten feet.

The north drift has been turned until it heads almost south towards the eastern extension of the vein. It passed through a fault zone which could possibly be an extension of the fault that truncated the vein at the west end of the 120 foot level.

No change has occurred in the south drift which remains in the black, carbonaceous, thin bedded limestone formation.

GRAHAM DEVELOPMENT CORPORATION
Charles R. Graham
Charles R. Graham, President

DEPARTMENT OF INTERIOR
BUREAU OF MINES
REGION III
RECEIVED

1953 MAY 21 AM 9:13

SAN FRANCISCO, CALIFORNIA

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

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
ACCOUNTS RECEIVED
MAY 4 1953

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of March, 1953 Docket No. DMEA 2289 Contract No. Idm-B467
Operator's Name Graham Development Corporation Minerals Tungsten
Address 1000 Lincoln Road, Miami Beach 39, Florida
Contract Amount, $ 17,120. Government Participation: 75% Amount, $ 12,840

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) ~~Independent~~ Short Form Contracts:						
Drilling						WSM
Bulldozing						
Cut Station Crosscutting		490.00	490.00			
Drifting	2516.	1443.	3959.			
Shaft sinking	1000.	4800.	5800.			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$ 3,516.	$ 6,733.	$ 10,249.			

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

Date Apr. 14, 53 *Payee Graham Development Corp.

Per Charles R. Graham Title President

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

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

(Instructions on reverse)

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

$ 2637 00

Lloyd H. Sjolander
Signature Authorized Certifying Officer
(Authorized Certifying Officer)

Date APR 27 1953 Vou. No. SF-Dmca-41

(See other side)

March 53

(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-1167 in accordance with the terms of the contract.

Signature R. C. Johnson Title Chief, Mining Div. Region III Date April 20, 1953.

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature H. C. Miller Title Executive Officer DMEA Field Team Region III Date April 22, 1953

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
April 1952

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

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

ACCOUNTS APR 23 1953 DEPARTMENT OF THE INTERIOR Defense Minerals Exploration Administration RECEIVED

OPERATOR'S UNIT COST AND PROGRESS REPORT

MAY 4 1953

Month of March 1953 Docket No. DMEA 2200 Contract No. 2dn-7467
Operator's Name Graham Development Corporation Minerals Tungsten
Address 1000 Lincoln Road, Miami Beach 39, Florida

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	Ft.	$ 2516.	60	$ 3959.	107	32.01	250	37.00
Crosscutting								
Raising								
Shafts	Ft.	$ 1000.	10	5000.	50	100.00	72	100.00
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Cut Station	ea.	-	-	400.00	1	400.00	1	500.00
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		$ 3516.		$ 10,259.				

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 Apr. 14, 1953 Operator Graham Development Corp.

Per Charles R. Graham Title President

Charles R. Graham

REMARKS:

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

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205676

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39, FLORIDA

TELEPHONE 5-0921

April 14, 1953

Reference: Docket DMEA 2289
Contract Idm-E467

NARRATIVE FOR MARCH, 1953

During March, 159 man shifts were worked underground. The 200 foot level North Drift was advanced 18½ feet and the 200 foot level South Drift was advanced 49½ feet. The shaft was extended 10 feet to provide for a sump.

The South Drift now extends a total of 68½ feet and the North Drift 38½ feet from the shaft at the 200 foot level.

Mineralization has diminished in each direction, North and South, from the shaft station. This is evidence that the vein adjacent to the North side of the shaft on the 200 foot level is the one being sought. There is a reasonable chance that this weak mineralization adjacent to the shaft will strengthen somewhere along the East or West extension of the vein. Therefore, the North Drift is being aimed to intersect the Easterly extension and a West drift has been started to intersect and explore the Westerly extension of the vein.

No assays were made during the month.

6" per man shift U.G.!

DEPARTMENT OF INTERIOR
BUREAU OF MINES
REGION III
RECEIVED

1967 APR 21 AM 8:46

SAN FRANCISCO, CALIFORNIA

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

Budget Bureau No. 22-R1036.3.
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

ACCOUNTS
MAR 19 1953

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of February, 1953 Docket No. DMEA 2289 Contract No. Idm-E467
Operator's Name Graham Development Corporation Minerals Tungsten
Address Ten Hundred Lincoln Road, Miami Beach 39, Fla.
Contract Amount, $ 17,120 Government Participation: 75 % Amount, $ 12,840

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent / Short Form Contracts:						
Drilling						w SM
Bulldozing						
Crosscutting Cut Station	490.00	None	490.00			
Drifting	1443.00	None	1,443.00			
Shaft Sinking	1150.00	3650.00	4,800.00			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	3083.00	3,650.00	6,733.00			

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

Date 3-14-53 *Payee Graham Development Corp.

Per Charles R. Graham Title President
Charles R. Graham

*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:

$ 2,312.25

Lloyd H. Sjolander
Authorized Certifying Officer

Signature
(Authorized Certifying Officer)

Date MAR 24 1953 Vou. No. SF-DMEA-38

(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. [illegible] in accordance with the terms of the contract.

Signature A. C. Johnson Title [illegible] Date [illegible] 28, 1953.

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature N. C. Miller Title Executive Officer DMEA Field Team Region III Date March 19, 1953

H. C. Miller

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.

DEPARTMENT OF INTERIOR
BUREAU OF MINES
REGION III
SAN FRANCISCO, CALIF.

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

ACCOUNTS MAR 19 1953

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of February 1953 Docket No. DMEA 2239 Contract No. Idm-R467
Operator's Name Graham Development Corporation Minerals Tungsten
Address 1000 Lincoln Road, Miami Beach 39, Fla.

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	Ft.	1443.00	39	1443.00	39	$ 37	250	$ 37.
Crosscutting								
Raising								
Shafts	Ft.	1150.00	11.5	4800.00	48	$ 100	72	$ 100.
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Cut Station	ea.	490.00	1	490.00	1	$ 490.	1	$ 490
TOTAL DISTRIBUTED COSTS		3083.00		6733.00				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		3083.00		6733.00				

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

Date 3-14-53 Operator Graham Development Corp

Per Charles R. Graham Title President
Charles R. Graham

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)

INSTRUCTIONS

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205676

DEPARTMENT OF INTERIOR
BUREAU OF MINES
REGION III
RECEIVED
1955 MAR 19 AM 9:26
SAN FRANCISCO, CALIFORNIA

GRAHAM DEVELOPMENT CORPORATION

1000 Lincoln Road

Miami Beach 39, Florida

Docket No. DMEA 2289 Contract No. Idm-E467

NARRATIVE FOR THE MONTH OF FEBRUARY, 1953

March 14, 1953

The shaft was advanced 11.5 feet during the month bringing it to a total depth on incline to 200 feet from the surface. At this level a station was cut and drifting began to the South and the North. The North drift was advanced 20 feet from the shaft and the South drift was advanced 19 feet. Shaft work will begin again to cut a sump before continuing drifting.

Development work for February penetrated a shear zone that may belong to a regional fault. The zone is mixed with blocky limestone and thin bedded argillaceous shales. There is no positive identification of the shear zone to enable correlating it with the fault shown on the 120 foot level. Since the vein on upper mine section dipped to the South, about 30 feet of drifting will be required to contact this zone. No assays were made.

Graham Development Corporation

Charles R. Graham

Charles R. Graham, Pres.

DEPARTMENT OF
BUREAU OF MINES
REGION III
RECEIVED

1953 MAR 19 AM 9:26

SAN FRANCISCO, CALIFORNIA

Form MF-154 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.3
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

ACCOUNTS FEB 20 1953

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of January, 1953 Docket No. DMEA 2209 Contract No. DMEA-3 467
Operator's Name Graham Development Corporation Minerals Tungsten
Address Ten Hundred Lincoln Road, Miami Beach 39, Fla.
Contract Amount, $ 17,120 Government Participation: 75% Amount, $ 12,840.

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent / Short Form Contracts:						
Drilling						
Bulldozing						
Crosscutting						
Drifting						
Sheet shaking	32.5 ft.	4 ft.	36.5 ft.			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$ 3250.		$ 3690			

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

Date Feb 11, 1953 Payee Graham Development Corporation

Per Charles R. Graham Title President

Charles R. Graham

*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:

$2437.50

Boyd L. Sjolander
Authorized Certifying Officer

Signature
(Authorized Certifying Officer)

Date FEB 24 1953 Vou. No. SF-Omca-34

(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. [illegible] in accordance with the terms of the contract.

Signature [illegible] Title Chief, Indus. Div. Date February 17, 1953.

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature [illegible] Title Executive Officer, DMEA Field Team, Region III Date February 20, 1953

R. C. Miller

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR

ACCOUNTS FEB 20 1953

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of January 1953 Docket No. DMEA 2209 Contract No. [illegible] 467
Operator's Name Graham Development Corporation Minerals [illegible]
Address Ten Hundred Lincoln Road, Miami Beach 39, Fla.

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	Foot	3250.	32.5	3650.	36.5	100.	26.	100.
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Total Distributed Costs								Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		3250.		3650.				27,260

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 Feb. 11 Operator Graham Development Corp.

Per Charles R. Graham Title President
Charles R. Graham

Remarks:

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

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205676

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39, FLORIDA
TELEPHONE 5-0921

February 11, 1953

Defense Minerals Exploration Administration

Reference: Docket DMEA 2289
Contract IDM-E 467

Narrative for the month of January, 1953

On January 4, the mine crew was increased from four to eleven men. There were three crews of three men each and two supervisors.

A total of 22 rounds were blasted, and 513 skips of waste were hoisted. Progress was slow due to inexperience of the new men.

The geology showed no radical change. The shaft is penetrating bedded brown to black (carbonaceous) limestone interspersed with seams and small lenses of milkwhite calcite and quartz. It is almost devoid of scheelite mineralization. Intense folding and faulting have distorted the bedding into a twisted mixture that affords no definite dips or strikes other than a general attitude dipping southerly and striking easterly and westerly. No assays were made.

Total shaft advance for the month 32.5 feet

Depth below the 100 foot level 88.5 feet

GRAHAM DEVELOPMENT CORPORATION
Charles R. Graham
Charles R. Graham, President

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

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

ACCOUNTS FEB 20 1953

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of December, 1952 Docket No. DMEA 2289 Contract No. IDM-E 467
Operator's Name Graham Development Corporation Minerals Tungsten
Address Ten Hundred Lincoln Road, Miami Beach 39, Fla
Contract Amount, $ 17,120. Government Participation: 75% Amount, $ 12,840

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) ~~Independent~~ Short Form Contracts:						
Drilling						WSM
Bulldozing						
Crosscutting						
Drifting						
Shaft sinking	4 ft.	none	4 ft.			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$ 400.		$ 400.			

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

Date Feb 11, 1953 *Payee Graham Development Corporation

Per Charles R. Graham Title President

Charles R. Graham

*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:

$ 300 00

Signature Tom M. Stokes
Authorized Certifying Officer
(Authorized Certifying Officer)

Date FEB 24 1953 Vou. No. SF-DMEA-34

(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. [illegible] in accordance with the terms of the contract.

Signature [illegible] Title [illegible] Date February 27, 1953.

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature [illegible] Title Executive Officer DMEA Field Team Region III Date February 20, 1953

H. C. Miller

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR

ACCOUNTS FEB 20 1953

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of December 1952 Docket No. DMEA 2289 Contract No. IDM-E 467
Operator's Name Graham Development Corporation Minerals Tungsten
Address Ten Hundred Lincoln Road, Miami Beach 39, Fla.

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising	Linear							
Shafts	Foot	$ 400.	4 ft.	$ 400.	4 ft	$ 100.	Feet	$ 100.00
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		$ 400.		$ 400.				$ 17,120.

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 Feb. 11, 1953 Operator Graham Development Corp.

Per Charles R. Graham Title President
Charles R. Graham

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)

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

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39, FLORIDA

February 11, 1953

TELEPHONE 5-0921

Defense Minerals Exploration Administration

Reference: Docket DMEA 2289
Contract IDM-E 467

Narrative for the month of December 1952

Work on the contract was started on December 18, 1952, with four employees operating one shift per day.

One full round was blasted and the net gain in the shaft amounted to four feet.

Four days were used to prepare the mine for three shift operation. Surface tracks were rearranged, a ventilating fan was suspended in the shaft, equipment was repaired and adjusted, and additional supplies were trucked to the mine.

No assays were made because the bottom of the shaft is not presently in mineralized material.

On December 18, starting date of the contract, the shaft depth was 52 feet below the 100 foot level. On December 31, the shaft depth was 56 feet below the 100 foot level, a net advance for the month of 4 feet.

GRAHAM DEVELOPMENT CORPORATION
Charles R. Graham
Charles R. Graham, President

FILE COPY
SURNAME:

Rutledge
Martin
Chandler

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

October 1, 1953

MEMORANDUM

To: Administrator, DMEA

From: Iron and Ferro-Alloys Division, DMEA

Subject: Memorandum of Non-Discovery
Docket No. DMEA 2289 - Tungsten
Graham Development Corporation
Black Horse Tungsten mine
White Pine County, Nevada
Exploration Project Contract No. Idm-E467

This Division hereby concludes that the work done upon the subject property, as described under Exhibit "A" of the contract, has resulted in no discovery or development from which commercial production may be made.

A description of the property, the work done, and the results obtained follows:

(1) The property on which the exploration was conducted is composed of the Gold King No. 1 and Gold King No. 2 unpatented mining claims located in Sec. 24, T. 15 N., R. 68 E., in the Black Horse Mining District. The two claims are recorded on page 428, Book 123, in the office of the Recorder at Ely, Nevada.

(2) The mineral sought was scheelite, which occurs in small shoots and lenses in quartz-calcite veins 1 to 3 feet wide along bedding plane faults in thin-bedded carbonaceous shale. The Black Horse tungsten vein is in a fault zone which strikes east and dips steeply. Locally the fault zone is 9 feet wide but averages about 2 feet. Lenticular masses of quartz contained in the vein averages about a foot in width.

(3) The Black Horse tungsten vein had been developed by an inclined shaft and three levels at 50, 100, and 120 feet, respectively, prior to the execution of the DMEA contract. The Black Horse fault, a post mineral (?) fault which terminates the Black Horse vein, is exposed in the west face of the drift on the 120-foot level. Exploration

R.C.B. 10-5-53

under the DMEA contract was to extend the incline to the 200-foot level and drift and/or crosscut a total of 250 feet on the 200-foot level to explore the vein on the hanging wall side of the Black Horse fault and to determine its presence or absence on the footwall side of the fault.

(4) Shaft sinking was started on the main vein at a depth of 155 feet. At 165 feet, the vein pinched and flattened to a dip of 10° south and cut the south wall of the shaft. The Field Team's final report states the projected position of the vein on the 200-foot level would be 20 feet south of the shaft. However, this projection does not consider either the local (?) flattening of the vein or any possible offsetting of the vein by the Black Horse fault.

(5) The exploration work completed apparently does not follow the full intent of the contract. Though the Black Horse fault was not recognized on the 200-foot level and may not play as important a part as thought by the Operator and the Field Team, the workings driven were mainly to the west of the projected position of the Black Horse fault and in the footwall instead of the hanging wall. D. M. Lemmon, Geological Survey, in his memorandum of September 8, 1952, to DMEA, questioned the importance of the Black Horse fault.

(6) Exploration on the 120-foot level prior to the execution of the subject contract disclosed little or no high grade ore. In addition, the areas stoped along the vein may indicate that there is a westerly plunge to the zone of better mineralization and width of vein. If this is true, the Black Horse fault would intersect this zone at approximately the 160-foot level.

(7) The incline was sunk an additional 58 feet, a shaft station cut, and 306 feet of drifting and crosscutting completed, 250 feet of which was allowable under the contract. The work was on a unit cost basis.

58	feet incline @ $100.00 per ft.	$5,800.00
	Shaft station	490.00
250	feet drift @ $37.00 per ft.	9,250.00
	Total	$15,540.00
	Government's share	11,655.00

(8) No scheelite mineralization of economic value was discovered.

(9) The Field Team recommended that the DMEA should certify the project as unsuccessful as no discovery was made but that if future exploration by the Operator discovers commercial quantities of ore on this level, the Government should be entitled to royalty payments. This statement may indicate that the Field Team shares this Division's belief that the exploration was misdirected. However, it is not believed that any such "non-discovery certification" may be made under our regulations.

(10) The Operator's costs were in excess of the agreed costs. The exploration was high cost mainly because of poor management which resulted in low productivity by the miners. This was one of the factors recognized when the contract was being prepared. The Operator's costs in relation to the agreed unit costs follow:

	Operator's Actual Costs	Agreed Unit Cost
Sinking	$188.50/ft.	$100.00/ft.
Drifting	69.70/ft.	37.00/ft.

(11) The subject contract was entered into only because, by delay in handling the application, an implied commitment had been made. All the information available indicated that the project had very little chance of making a significant discovery. The negative results substantiate the judgment involved in our decisions to reduce the scope of the original program and to put the contract on a unit cost basis so that low efficiency would penalize the Operator without affecting DMEA.

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

FARutledge/ls
7/30/53

cc: Docket
Oper. Comm.
Adm. Read. File
Code 400
Field Team, Reg. 3

Yes Audited

No Certified

WORK ANALYSIS SHEET - DMEA PROJECT

Analysis as of 12/10/1954
Incl. Voucher for _____

Actual Cost

X Agreed Unit Costs

Name Graham Development Company

Docket No. DMEA-2289

State Nevada

Commodity Tungsten

Idm-E No. 467

OPERATION	AUTHORIZED Units	AUTHORIZED Cost	COMPLETED Units	COMPLETED Cost	NET COST
Drifting & Crosscutting	250'	9,250.00	250'	9,250.00	37.00 ft.
Raising					
Shafts	72'	7,200.00	58'	5,800.00	100.00 ft.
Winzes					
Drilling (Specify)					
Surface Excavation					
Underground Excavation Station		490.00		490.00	
Roads and Trails					
Operating Equipment Purchased					
Surface Rehabilitation & Repairs					
Underground Rehabilitation					
New Building, Improvements, etc.					
Other (Specify) Assays		180.00			
Totals		17,120.00		15,540.00	

Prepared by TLC

71626

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

1012 Flood Building
870 Market Street
San Francisco 2, Calif.

September 15, 1953

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-2289 (Tungsten)
Black Horse Mine, White Pine County, Nevada
Contract Idm-E467

Reference is made to your letter of September 9, 1953, regarding status of this project.

With our memorandum of September 10, 1953, we forwarded to your office final reports by the Operator and the examining field team. Report of Review, dated July 15, 1953, has also been submitted by DMEA Auditor George Mavor in connection with this project.

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

Copy to: E. H. Bailey, USGS

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

1012 Flood Building
870 Market Street
San Francisco 2, Calif.

September 14, 1953

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Operator's Monthly Progress Reports - Forms MF-104 & 104A

Enclosed herewith are two copies of the subject report received from the following Operator. This report has been audited and passed to the Treasury for payment.

Contract No.	Operator	Report dated	Period covered
Idm-E467 DMEA-2289	Graham Development Corp.	June 15, 1953	May through June 8, 1953

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

Attachment

Copy to: E. H. Bailey, USGS

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

1012 Flood Building
870 Market Street
San Francisco 2, Calif.

September 10, 1953

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-2289 (Tungsten)
Black Horse Mine, White Pine County, Nevada
Contract Idm-E467

Attached are four copies of the final report on the subject property entitled "DMEA-2289, Black Horse Mine, White Pine County, Nevada," by Henry W. Jones, Mining Engineer, U. S. Bureau of Mines, and Roscoe M. Smith, Geologist, U. S. Geological Survey, dated August 21, 1953.

Also attached are four copies of Final Report by the Operator, dated June 30, 1953, together with map referred to therein.

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

Attachments

Copy to: E. H. Bailey, USGS
A. C. Johnson, Reno
George Mavor

Reviewed by
DMEA OPERATING COMMITTEE
9-27-53
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

Final Report
Idm-E467

DMEA-2289, Black Horse Mine

White Pine County, Nevada

(Tungsten)

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

Roscoe M. Smith, Geologist
U. S. Geological Survey

August 21, 1953

Reviewed by
DMEA OPERATING COMMITTEE

9-21-53
(date)

FINAL REPORT

Docket No.: DMEA-2289 (Tungsten)

Name and address of operator: Graham Development Corporation
1000 Lincoln Road
Miami Beach 39, Florida

Name and location of property: Black Horse Mine
White Pine County, Nevada

Contract No.: Idm-E467

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The Black Horse Mine was explored under DMEA contract Idm-E467 between December 18, 1952 and May 31, 1953.

Work done under the contract and the subsequent work carried out by the Development Corporation has explored, in part, the scheelite vein on the 200-foot level, determined the location of the Black Horse fault, on that level, and cut the vein structure on the hanging wall side of the Black Horse fault. The work comprised extending the inclined shaft an additional 58 feet to the 200-foot level and allowed for a 11-foot sump and skip pocket. A shaft and pumping station was cut, and about 306 feet of drifting and crosscutting was completed; 250 feet of which was allowable on the contract. No mineable ore structures were revealed. Work on this level, however, will continue for a time on company account. Total cost of the project was $15,540.

Conclusions:

The exploration work was done in a black, thin bedded limestone with calcite stringers following the planes of bedding. Work was directed toward finding and exploring the hanging wall side of the

Black Horse fault.

Sparse scheelite showings on the 200-foot level, observed over an overall width of about 130 feet, indicates that mineralization of commercial value does not persist down to this level; at least within this horizon.

Recommendations:

It is recommended that:

1. No further additional exploration, financed with Government assistance, be approved.
2. The DMEA should certify the project as unsuccessful, as no discoveries of significance were made by extending the shaft to the 200-foot level and driving exploratory drifts from this level. However, if future exploration discovers commercial quantities of ore on this level, the Government should be entitled to royalty payments.
3. Production from the new mine workings is not at present economically feasible.

DESCRIPTION OF WORK COMPLETED

The contract with the Graham Development Corporation, with Charles R. Graham as president, was signed for a DMEA exploration project on the 18th day of December, 1952 with work to be completed within 9 months. Shaft sinking was already in progress. Work was terminated on May 31, 1953 when the available drifting and crosscutting footages were used up.

A measuring point was established in the shaft by the engineer of the Bureau of Mines and B. E. Reese, mine superintendent, from which all future measurements were to be taken.

The program was divided into three steps: Step I - to sink the Black Horse shaft an additional 72 feet to reach the 200-foot level and provide for a sump; Step II - cut a shaft station on the 200-foot level; Step III - drift and/or crosscut a total of 250 feet on the 200-foot level to explore the vein on the hanging wall side of the Black Horse fault and to determine at least its presence or absence on the footwall side of the fault.

Step I. The shaft was sunk a total of 58.0 feet below the point of beginning. This allowed an 11-foot sump instead of the prescribed 25-foot sump below the 200-foot level. The foreman in charge believed it would be adequate to allow for the waste pocket and the flow of water entering the mine (about 25 gallons per minute).

Step II. A North and South heading was started on the 200-foot level before the shaft sump was completed. The northern heading was widened for about 10 feet to allow for a pumping station. A platform and small dump pocket was then installed in the shaft.

Step III. The North and South headings were advanced simaltaneously from the shaft in an effort to discover the downward extension of the Black Horse fault. A small calcite seam, containing sparse indications of scheelite, was noted about 4 feet north of the shaft, striking N. 80° W, and dipping 70° South. A West drift was started from the Northern heading, at a point about 15 feet from the edge of

the shaft, doubling back for about 43 feet to pick up the continuation of the mineralized seam. Although the seam persisted, the values did not increase or show indications of widening, so the heading was abandoned.

There was no indication of mineralization or major faulting in the 77 feet of crosscutting to the south and it was also discontinued. The Northern crosscut was continued 70 feet along a pronounced barren stringer, and slippage plane, in the belief this was similar to the mineralized vein structure found in the upper levels. The stringer horsetailed out and the heading was again changed to pick up the eastward continuation of the mineralized stringer, and the hanging wall side of the Black Horse fault. Faults and open fissures were soon encountered and continued for about 31 feet, the strike varying from North to N. 35° E. and dipping 35° to 65° S.E. The faults are believed to be the downward continuation of the Black Horse fault. This drift was driven 56 feet before the Step III phase was completed.

The drift was continued southeasterly an additional 34 feet on company account before a mineralized stringer similar to the one at the shaft was encountered, the strike was determined to be N. 80° W. and dipped 75° South. About 20 feet of additional work by the company along the strike of the scheelite showing failed to reveal any other mineralization.

Additional company account work was done on the West drift. The mineralized fissure was followed another 22 feet before it was faulted off and lost.

GEOLOGY

In the mine area limestone, shale, carbonaceous shale, and carbonaceous limestone have been highly folded and faulted; the beds strike east and dip steeply north, or are overturned. The rocks have been cut by faults that are nearly parallel to the bedding and by one other fault, the post-mineral (?) Black Horse fault which strikes N. 25°-45° E. and dips 50°-70° SE.

ORE DEPOSITS

The ore bodies are quartz-calcite veins along the bedding faults. The veins pinch and swell along the strike and down the dip and range from a knife edge to about 3 feet in width. They have been mined to a depth of 120 feet. The ore mineral is scheelite which occurs disseminated irregularly in the veins. The total production to date is about 730 tons; average grade of the ore mined was about 2.0 percent WO_3.

No ore was found by the work under the DMEA contract. Shaft sinking was started on the main vein at a depth of 155 feet. At an incline depth of 165 feet in the shaft, the vein pinches, flattens, and dips about 10° south, cutting the south wall of the shaft. On the 200-foot level the projected position of the vein is 20 feet south of the shaft. A crosscut was driven 75 feet south from the shaft but the vein was not found. A vein that strikes east and dips 70° S. was cut in the station about 3 feet north of the shaft, and is composed of 1-8 inches of quartz and calcite and contains scattered crystals of scheelite. Near the face of the east crosscut a similar vein was cut.

Elsewhere on the level a few barren calcite stringers were found. Three faults in the east crosscut (fig. 4) may be strands of the Black Horse fault but they could not be seen in the wet, freshly driven shaft. A crosscut to the west reavealed no ore minerals or vein quartz.

ORE RESERVES

Reserves of 1,200 tons of ore inferred to be above the 200 level from showings in June, 1952 was the target of the exploratory work. The work on the 200-foot level, eliminates a large part of the vein area from any class of ore reserve. One half of that area (above 165 feet in the shaft) may average 1.0 feet in thickness and is inferred to contain 600 tons of ore averaging 0.5 percent WO_3.

EXPENDITURES

Total approved	$17,120.00
Total cost of project	15,540.00
Government share of the cost	11,655.00
Government share unexpended	1,185.00
Value of production during operations and Government royalty . .	None

No production was made from the mine during the DMEA exploration project and no royalty payments are due the Government.

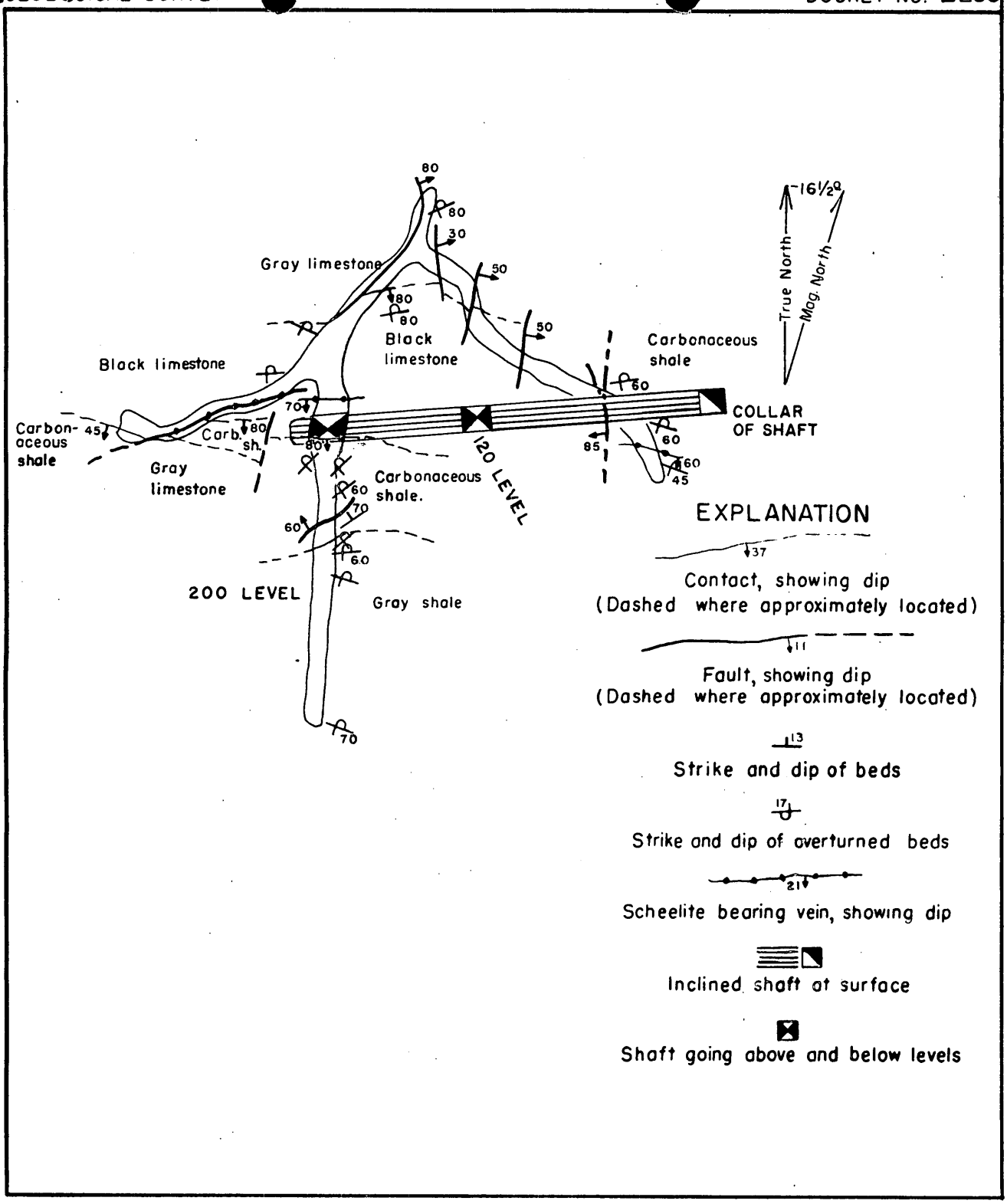
EFFICIENCY OF OPERATIONS

Mining operations were carried out in an ineffective manner because of the following reasons:

1. Inadequate shaft hoisting equipment.
2. Inability to keep experienced miners.
3. Conflicting policies of the mine management.

EQUIPMENT PURCHASED FOR PROJECT

No equipment was purchased for the project.



Geology by R. M. Smith

FIG. 4

GEOLOGIC MAP OF THE BLACK HORSE MINE
200 FOOT LEVEL
WHITE PINE COUNTY, NEVADA

0 40 80 120 ft.

Scale

GRAHAM DEVELOPMENT CORPORATION

OIL & GAS DIVISION

P. O. Box 166 PETERSBURG, INDIANA

Docket DMEA 2289
Contract Idm-E467

1000 Lincoln Road
Miami Beach 39, Fla
June 30, 1953

FINAL NARRATIVE

A total of 58 feet of shaft and 250 feet of drifting and crosscutting on the 200 foot level has been completed. The shaft footage was reduced because, due to reduced water inflow, a ten foot sump was found to be sufficient. A map showing the work on the 200 foot level is included herewith.

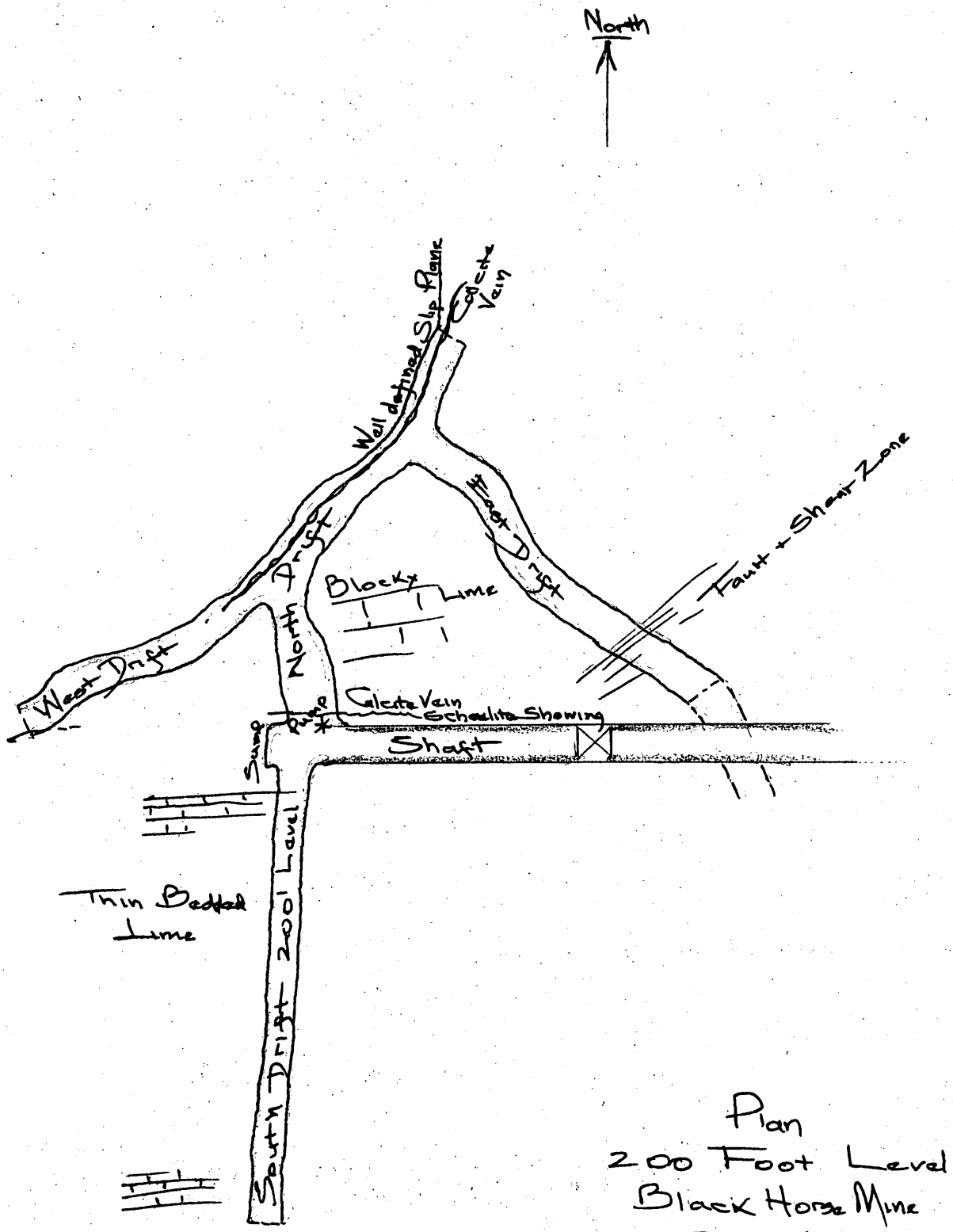
The effect of the Northeast Southwest fault encountered at the 120 foot level was more pronounced on the 200 foot level than could be determined from the indications above. It developed into a shear zone at least 50 feet wide and has made it difficult to locate or tie in the exploration work under the fault with the origonal vein.

A small calcite stringer was encountered about 4 feet from the shaft in the North Drift. It showed small particles of scheelite, but sparingly. It was at first thought to be an indication of the main vein. Exploration work mostly to the West did not disclose anything of value nor could it be tied in with the vein system above. About 30 feet further in the North Drift, another but larger calcite vein was found. It did not show any scheelite but followed a pronounced slip plane which was similar to that along the vein above where good values had been found. The direction of it was so opposed to its correlation with above, it was decided it could not be related. The North Drift was advanced along it until it horsetailed out. It was thought that it might cut the main fault which would aid in locating the main vein system.

With the exploration work that had been done up to this time, it became evident that it was necessary to find the main vein extension on the hanging wall side of the fault before further exploration work could be done to locate the possibilities of ore under the fault. Accordingly, the East Drift was laid out, but because of the unusual and extensive shear zone encountered, the remaining footage under the DMEA contract was used up.

All of the exploration work has been done in black lime except for the work in the South Drift which was a shale or slate like black lime formation.

Re: Docket DMEA 2289, Contract Idm-E467
Graham Development Corp., 1000 Lincoln Road, Miami Beach, Fla.



Plan
200 Foot Level
Black Horse Mine
Scale 1" = 25'

6/8-53

Form MF-104-A
(April 1952)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of June 195 3 Docket No. DMEA 2289 Contract No. Idm-E467
Operator's Name Graham Development Corporation Minerals Tungsten
Address 1000 Lincoln Road, Miami Beach 39, Fla.

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting	Ft	0		9,250.	250	69.70	250	37.00
Crosscutting								
Raising								
Shafts	Ft.	0		5,800	58	188.50	72	100.00
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Cut Station	ea.	0		490.00	1	490.	1	490.00
TOTAL DISTRIBUTED COSTS				15,540.				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc								
TOTAL COSTS				15,540.				

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 June 30, 53 Operator Graham Development Corp.

Per Charles R. Graham Title President
Charles R. Graham

REMARKS: Final MF-104 was submitted on June 15. This is a final summary included with the final narrative.

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

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS.

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205676

400

FILE COPY
SURNAME:

Rutledge
Martin
Selfridge
Tillman
Mitchell

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

SEP 9 - 1953

Mr. H. C. Miller, Executive Officer
DMEA Field Team, Region III
1012 Flood Building
870 Market Street
San Francisco 2, California

Re: Docket No. DMEA 2289 - Tungsten
Graham Development Corporation
Black Horse Tungsten mine
White Pine County, Nevada
Contract No. Idm-E467

Dear Mr. Miller:

Reference is made to the subject contract, the interim report dated June 3, 1953, by Henry W. Jones, Bureau of Mines, and our letter of June 18, 1953.

Because no amendment to the referenced contract has been received and the time for completion of the contract expires September 18, 1953, it would be appreciated if you would advise us of the status of this project.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

APPROVED:

J. H. Hedges

Member, Bureau of Mines

A. R. Kinkel, Jr.

Member, Geological Survey

Copy to: Docket
Field Team, Reg. 3
Adm. Read. File
Oper. Committee
Code 400
Mary Miller, USGS
R. W. Geehan, USBM

FARutledge/ls
9/9/53

R.C.B.
9-9-53

FILE COPY
SURNAME:

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

400

Rutledge
Martin
Selfridge
Hedges
Kinkel
Wittenberg

JUN 18 1953

Mr. H. C. Miller, Executive Officer
DMEA Field Team, Region III
1012 Flood Building
870 Market Street
San Francisco 2, California

Re: Docket No. DMEA 2289 - Tungsten
Graham Development Corporation
Black Horse Tungsten Mine
White Pine County, Nevada
Exploration Contract No. IDM-E467

Dear Mr. Miller:

Reference is made to the subject contract and the interim report dated June 3, 1953, by Henry W. Jones, Bureau of Mines.

In reviewing this docket it appears that most of the exploration to date is on the footwall side of the Black Horse fault. The contract contemplated that exploration on the 200-foot level would also explore the hanging wall side of the Black Horse fault, but the drift on the 200-foot level as driven has not explored the downward extensions of the ore bodies mined on the upper levels, and seems to have ended, in the footwall of the fault, on May 26.

For this reason we would approve a transfer of the remainder of the funds set up for sinking to allow more drifting on the 200-foot level, if requested by the Operator. However, any amendment prepared to cover such a transfer should require the Operator to drift to the east under the old stopes.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee

APPROVED:

J. H. Hedges
Member, Bureau of Mines

A. R. Kinkel, Jr.
Member, Geological Survey

FARutledge:foc
6-16-53
cc: Docket
Code 400
Adm. Reading File
Operating Committee
FT. Reg. 3
R. W. Geehan, USBM
D. M. Lemmon, USGS

FILE COPY
SURNAME:
800

Alley
Talbot
Chambers

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

BH
6/15/53

Mr. Lloyd H. Sjolander
DMEA Finance Officer
1012 Flood Building
870 Market Street
San Francisco 2, California

Re: Idm-2467, DMEA-2289
Graham Development Corp.

Dear Mr. Sjolander:

Receipt is acknowledged of the April MF-104 for the above referenced project.

In the event that you have not already made the correction, your attention is called to the fact that payment was made on this voucher on the basis of 50% Government participation rather than 75% as provided in the contract.

Sincerely yours,

Jay L. Chambers, Chief
Contract Administration
and Audit Division
MDL 6-15-53

AMAlley/ama
June 15, 1953

Copy to: Admr. Reading File
Mail and Files
Mr. Chambers

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 12 1953

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Office of
Executive Officer
DMEA Field Team
Region III

1012 Flood Building
870 Market Street
San Francisco 2, Calif.

Date: June 8, 1953

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Interim Inspection Report

Attached are four copies of Interim Report on -

Docket DMEA 2289

Contract Idm-E 467

Commodity Tungsten

Operator - Graham Development Corp.,
1000 Lincoln Road, Miami Beach 39, Fla.

Property - Black Horse Mine, White Pine County, Nevada

By Henry W. Jones, Mining Engineer

Dated June 3, 1953

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

Attachment

Copy to: Finance Officer, Region III (With one copy of report)

E. H. Bailey, USGS (With one copy of report)

George Mavor

INTERIM REPORT

Docket No.: DMEA-2289 (tungsten) June 3, 1953

Name and address of operator: Graham Development Corp.,
1000 Lincoln Road
Miami Beach 39, Fla.

Name and location of property: Black Horse Mine,
White Pine County, Nev.

Contract No.: Idm-E467

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The Black Horse tungsten mine, located about 52 miles west of Ely, Nev., was visited on May 26 to check the progress under the DMEA exploration contract.

Work between the periods of May 5 and May 26, 1953 consisted of advancing two headings on the 200 level a distance of 40 feet. Total footage to date is 239 feet leaving 11 feet of crosscutting and drifting to be completed under the DMEA contract.

Most of the work is now confined to the mining of ore from the 100-foot level and shipping to the Sodaville mill near Mina, Nev.

Work is progressing quite slowly but is considered satisfactory in view of the limited remaining footages available.

No recommendations are submitted at this time.

STATEMENT OF WORK COMPLETED

The Black Horse mine was visited in company with B. E. Reese, mine superintendent on May 26, 1953. Measurements and a Brunton survey were run on the newly completed workings.

Work during the periods between May 5 and May 26 consisted of advancing two headings on the 200 level an additional 40 feet for a

total footage of 239 feet. A small spur was extended northward from the North crosscut for a distance of 18 feet. The crosscut was extended south eastward an additional 22 feet where a fault was encountered (see map). The strike of this fault is North and South with a dip of 65° East. No mineralization was observed and no samples were taken.

PROGRESS

Drifting progress was slow. Five miners and muckers are currently employed plus the foreman and superintendent.

DISCUSSION

There is currently 11 feet remaining of the total 250 feet allowed for drifting and crosscutting on the DMEA contract.

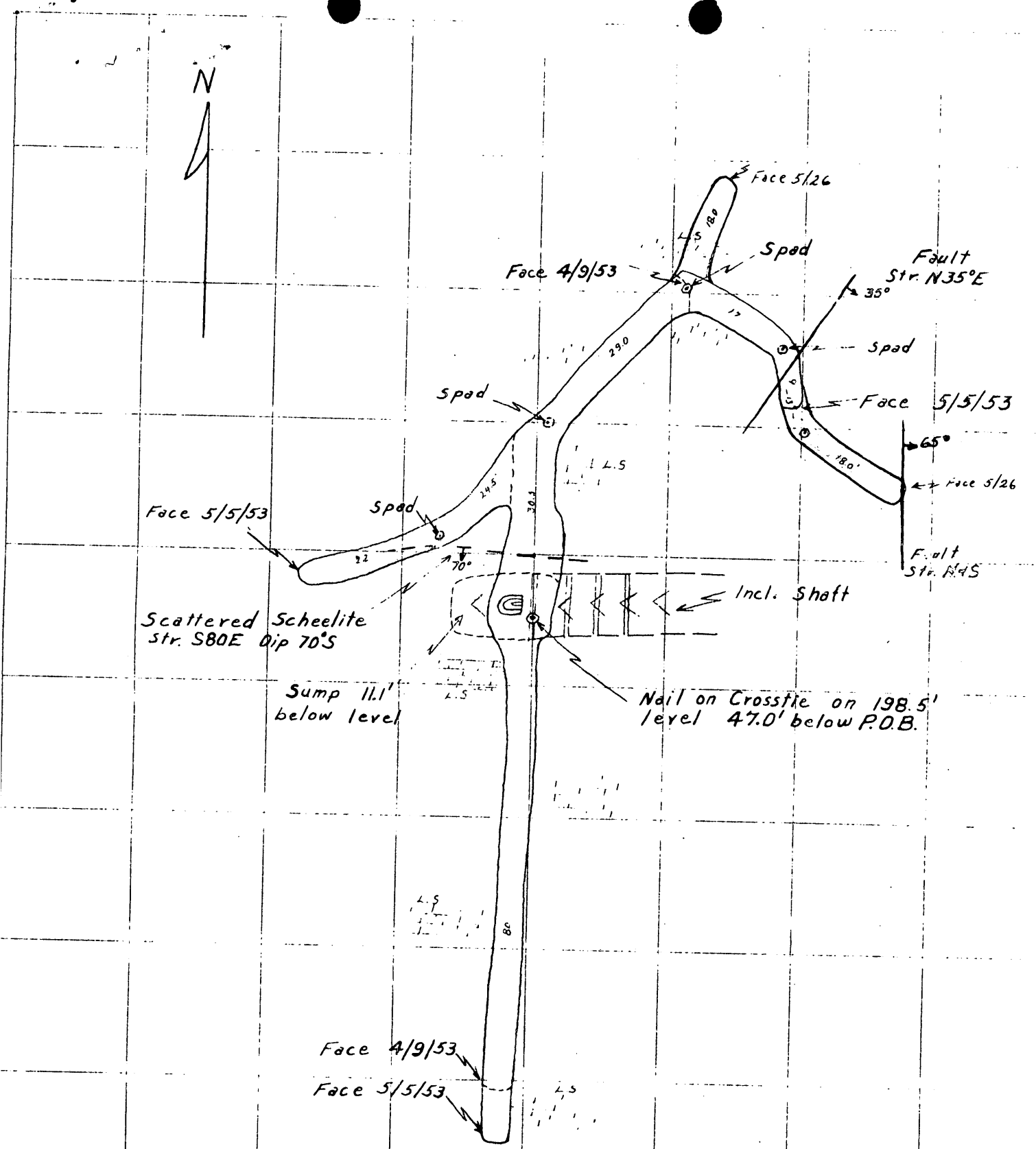
Mr. Reese, the mine superintendent, reportedly wrote Mr. Graham suggesting an application for an amendment to the contract. This would allow the usage of the funds originally slated for sinking to be used for additional drifting. The $1400.00 not used would increase the drifting and crosscutting footage by about 38 feet. Inasmuch as there was no reply concerning this matter, it can be assumed the reallotment of these funds is not going to be requested.

Instructions were received by Reese to mine and ship at least 150 tons of scheelite ore from the property.

Most of the mine work is now confined to the stoping or ore from the 100 level (not included in the contract). It is being hauled by truck to the Sodaville mill near Mina, Nevada for processing. Payments are made on a straight $34.00/unit basis on the assay value of the ore.

Henry W. Jones

Henry W. Jones
Mining Engineer



BLACK HORSE MINE (Tungsten)
White Pine County, Nevada.
Plan 200 Level
Contract: IDM-E 467
scale 20'=1"

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Office of
Executive Officer
DMEA Field Team
Region III

1012 Flood Building
870 Market Street
San Francisco 2, Calif.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 8 1953

Date: June 1, 1953

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Interim Inspection Report

Attached are four copies of Interim Report on -

Docket DMEA 2289

Contract Idm-E 467

Commodity Tungsten

Operator - Graham Development Corp.,
1000 Lincoln Road, Miami Beach 39, Fla.

Property - Black Horse Mine, White Pine County, Nevada

By Henry W. Jones, Mining Engineer

Dated May 20, 1953

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

Attachment

Copy to: Finance Officer, Region III (With one copy of report)

E. H. Bailey, USGS (With one copy of report)

George Mavor

INTERIM REPORT

Docket No.: DMEA-2289 (Tungsten) May 20, 1953

Name and address of operator: Graham Development Corp.,
1000 Lincoln Road
Miami Beach 39, Florida.

Name and location of property: Black Horse Mine
White Pine County, Nev.

Contract No.: Idm-E467

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The Black Horse tungsten mine, located about 52 miles west of Ely, Nev. was visited on May 5, 1953 to check the monthly progress under the DMEA exploration contract.

Work during the period from April 9 through May 5 consisted of advancing the three headings on the 200 level an additional 77.5 feet. Total drifting and crosscutting footage to date is 198.8 feet. A drift driven to the west from the North crosscut encountered a scattered showing of scheelite the first few feet. There was no mineralization along the remainder of the drift.

The remainder of the footage allowed under the Government will be applied to the northerly and easterly extension of the North crosscut. Work is continuing in a satisfactory manner. No recommendations are submitted.

WORK COMPLETED

The Black Horse mine was visited in company with B. E. Reese, mine superintendent, on May 5, 1953, at which time a Brunton compass survey was run on the recent workings.

Work during the periods of April 9 and May 5, 1953 consisted of extending the South crosscut an additional 8 feet for a total length of 80 feet from the measuring point. The North crosscut was swung to the southeast an additional 26 feet for a total advance in that direction of 85 feet from the measuring point. This crosscut will eventually intersect the mineralized structure to the east of the shaft. A westerly drift was driven at a point about 20 feet north of the shaft that intersected the mineralized structure to the west. Total advance on this drift was 43.5 feet. Slight mineralization was encountered along the drift the first few feet but soon disappeared. No further advance is contemplated along this heading.

PROGRESS

Drifting progress has been slow in relation to the number of men employed. Six miners and muckers are currently employed working one shift per day, plus the foreman and engineer. A total of 77.5 feet of drifting and crosscutting was completed on the basis of 23 working days. Daily progress averaged 3.4 feet.

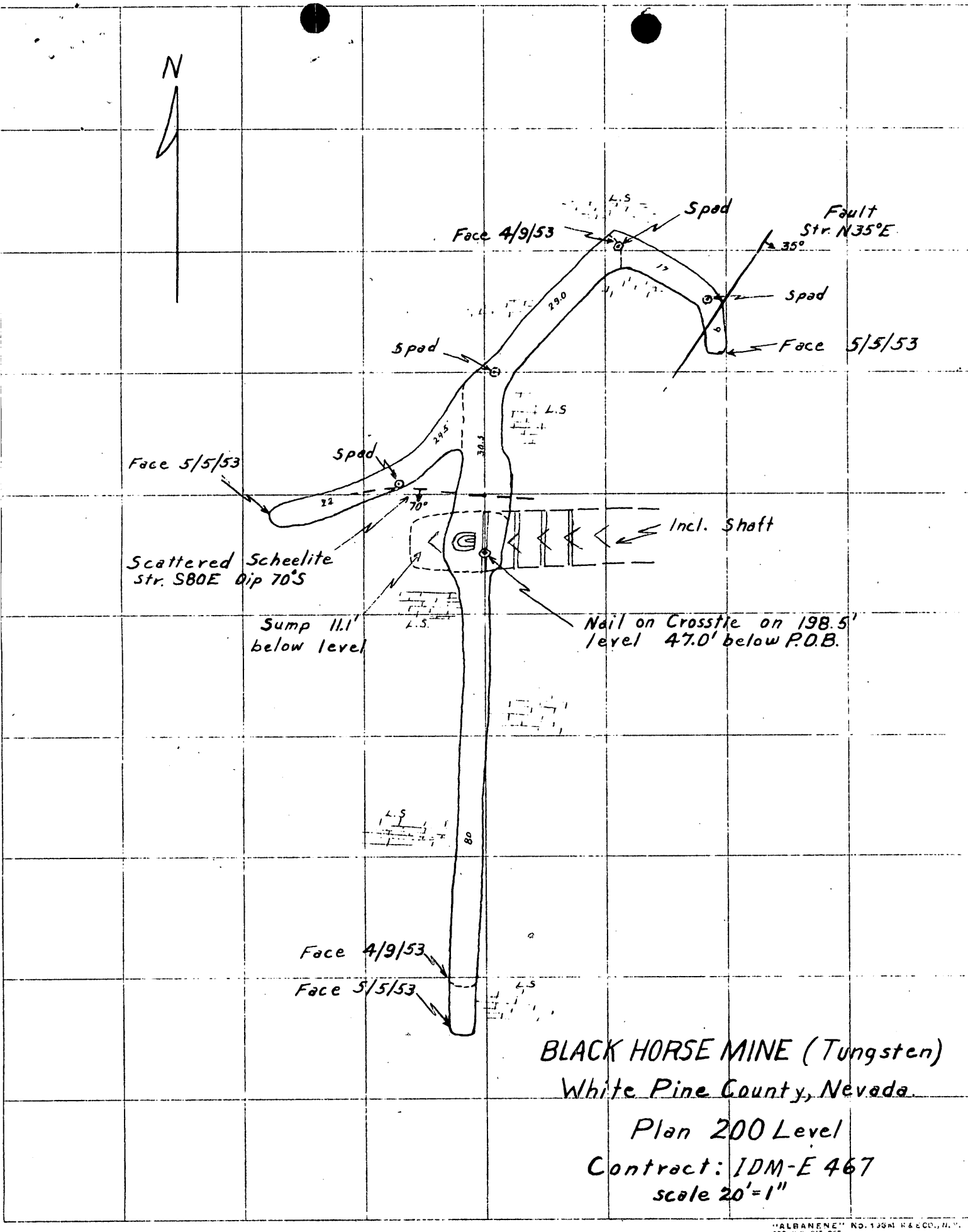
DISCUSSION

R. E. Margenau, vice president of the mining division of the Graham Development Corp. visited the property on May 4, 1953. Under his direction the crosscutting will continue to the north in the belief the mineralized section is faulted in that direction. He terminated the drifting to the west on the 200 level on the bais the ore bodies did not extend to the west of the shaft in the upper levels of the mine. If any footage remains, it will be used on the drifting to

the east.

A major fault structure was intersected in the eastern extension of the North crosscut, striking N. 35° E. and dipping 35° SE. It is believed by the visiting engineer this could be a portion of the downward extension of the Black Horse fault.

Henry W. Jones
Mining Engineer



"ALBANENE" No. 1.93M K&E CO., N.Y.
REG. U.S. PAT. OFF

~~100~~
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230

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Office of
Executive Officer
DMEA Field Team
Region III

1012 Flood Building
870 Market Street
San Francisco 2, Calif.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 4 1953

Date: April 29, 1953

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Interim Inspection Report

Attached are four copies of Interim Report on -

Docket DMEA 2289

Contract Idm-E 467

Commodity Tungsten

Operator - Graham Development Corp.
1000 Lincoln Road, Miami Beach 39, Fla.

Property - Black Horse Mine
White Pine County, Nevada

By Henry W. Jones, Mining Engineer

Dated April 20, 1953

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

Attachment

Copy to: Finance Officer, Region III (With one copy of report)

E. H. Bailey, USGS (With one copy of report)

George Mavor

DEPARTMENT OF THE INTERIOR
Defense Mineral Exploration Administration
MAY 4 1953

INTERIM REPORT

Docket No.: DMEA-2289 (Tungsten) April 20, 1953

Name and address of operator: Graham Development Corp.
1000 Lincoln Road
Miami Beach 39, Fla.

Name and location of property: Black Horse Mine
White Pine County, Nev.

Contract No.: Idm-E467

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The Black Horse tungsten mine, located 52 miles west of Ely, Nev., was visited on April 9, 1953 to check the monthly progress under the DMEA exploration contract.

Work applicable to the contract between periods March 4 and April 9, 1953 consisted of sinking the inclined shaft an additional 7.6 feet for a total advance of 58.1 feet. The two crosscuts on the 200 level were advanced 34.3 feet northerly and 48.0 feet southerly. Total crosscutting amounts to 121.3 feet. No mineralization was encountered in either crosscut.

Plans are underway to double back on the small discontinuous seam of scattered scheelite cut near the shaft station and drift both ways from the shaft along this structure.

Work is progressing at a more rapid pace and is considered satisfactory.

Shaft work was discontinued with little likelihood of it being extended the 72 feet as prescribed by the contract. It is recommended

by the visiting engineer that the remaining funds be used for additional drifting.

WORK COMPLETED

The Black Horse mine was visited on April 9, 1953. Work between the periods of March 4 and April 9, 1953 consisted of sinking the inclined shaft an additional 7.6 feet, which provides a 11 foot sump below the 200 level. Total shaft advance since the start of the project on Dec. 18, 1952 was 58 feet. The south crosscut at the 200 level was advanced on a S 3° W heading an additional 48 feet for a total length of 67 feet. The north crosscut was advanced an additional 34 feet for a total of 59 feet, the last 29 feet of which was driven on a N 45° E heading. No mineralization was encountered in either heading.

The operating engineer is now of the opinion that the small discontinuous seam of scheelite striking N 80° W and dipping 68° south and encountered about 5 feet north of the shaft station is the structure being sought. Plans are underway to start new headings from the north crosscut to intersect the ore bearing structure and drift each way along the strike.

PROGRESS

Drifting progress has increased considerably. A total of 82 feet of drifting and 7.5 feet of shaft sinking was accomplished on the basis of 31 working days at two shifts per day. Daily drifting progress averaged 2.6 feet.

Eight men are currently employed, plus the foreman and engineer.

DISCUSSION

The small sump does not provide sufficient storage to allow for lags in pumping operations. Information was received that the 200 level floods up to $1\frac{1}{2}$ feet in depth during a 12 hour shut down of the pumps. Mining machinery is moved to the next higher level if pumping is discontinued for longer periods.

Henry W. Jones

Henry W. Jones
Mining Engineer

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Office of
Executive Officer
DMEA Field Team
Region III

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 31 1953

1012 Flood Building
870 Market Street
San Francisco 2, Calif.

Date: March 27, 1953

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Interim Inspection Report

Attached are four copies of Interim Report on -

Docket DMEA 2289

Contract Idm-E 467

Commodity Tungsten

Operator - Graham Development Corp.
1000 Lincoln Road
Miami Beach 39, Fla.

Property - Black Horse Mine, White Pine County, Nev.

By Henry W. Jones, Mining Engineer

Dated March 17, 1953

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

Attachment

Copy to: Finance Officer, Region III (With one copy of report)

E. H. Bailey, USGS (With one copy of report)
George Mavor

INTERIM REPORT

Docket No.: DMEA-2289 (tungsten) March 17, 1953

Name and address of operator: Graham Development Corp.
1000 Lincoln Road
Miami Beach 39, Fla.

Name and location of property: Black Horse Mine
White Pine County, Nev.

Contract No.: Idm-E467

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The Black Horse tungsten mine, located 52 miles west of Ely, Nev., was visited on March 4, 1953 to check the monthly progress under the DMEA exploration contract.

During the period from Feb. 4 to March 4, the inclined shaft was sunk 8.3 feet to the present depth of 102.5 feet below the 100-foot level, or a total advance under Government contract of 50.5 feet.

Two drifts were driven from the 98.5-foot level, 20 feet north and 19 feet south, prior to the continuation of the shaft sinking.

The North drift and shaft was widened to allow for a shaft and pump station as prescribed in the contract.

Work is progressing rather slowly but is considered satisfactory in view of the adverse conditions.

The air tugger hoist on the shaft and heavy water flow are considered the chief factors in the slow mining progress.

The foreman, Merle Endecott, indicated he would request an amendment to the contract in which the depth of the sump below the 200-foot level would be terminated at 12 feet rather than the esti-

mated 23 feet as determined from the contract.

It is strongly recommended that the shaft be sunk the required depth. The large flow of water in the shaft would fill the smaller sump in a matter of 4 to 6 hours if pumping were discontinued. The larger sump would provide sufficient water storage so that the drifts would not become flooded if pumping were not continued on a 24-hour (3 shift) basis.

WORK COMPLETED

The Black Horse mine was visited on March 4, 1953 by a Bureau of Mines engineer, accompanied by B. E. Reese, mine superintendent. The inclined shaft was sunk 8.3 feet since the previous visit of Feb. 4, 1953. Total depth is 102.5 feet below the 100-foot level or a total advance under DMEA contract of 50.5 feet. Two drifts were advanced from the 98.5-foot level N 5° E 20 feet, and S 3° W 19.0 feet. A large station was cut and the North drift was widened for about 10 feet at this level to allow for a shaft and pumping station as prescribed by the contract.

PROGRESS

Progress has been rather slow with a total of 8.3 feet of shaft sinking and 39 feet of drifting for the month on the basis of 23 working days at three shifts per day. The foreman indicated it was difficult to keep experienced miners at such an isolated spot. Water is still the chief factor in the slow progress. The flow has again increased to an estimated 26 gallon per minute. The small shaft skip and the slow air tugger hoist also contribute to the slowness

of the operation.

A discontinuous seam of scattered scheelite crystals was cut on the station of the North drift but was considered too small to be considered of any importance. No samples were taken.

Henry W. Jones
Henry W. Jones
Mining Engineer

INTERIM REPORT

Docket No.: DMEA-2289 Feb. 16, 1953

Name and address of operator: Graham Development Corp.
1000 Lincoln Road
Miami Beach 39, Fla.

Name and location of property: Black Horse Mine,
White Pine County, Nev.

Contract No.: Idm-E467

SUMMARY, CONCLUSIONS, RECOMMENDATIONS

The Black Horse tungsten mine, situated in the Snake range, about 52 miles via U. S. Highway 6, west of Ely, Nev., was visited on Feb. 4, 1953 to check progress under the DMEA contract. Starting date of the contract was Dec. 18, 1952. A visit was made to the mine on Jan. 7, 1953 at which time the starting point was established. The mine was again examined on Feb. 4, 1953 and the total advance on the inclined shaft under the contract was determined to be 42.2 feet, 36.5 feet of which was submitted by the Graham Development Corp. to cover expenses up to Feb. 1, 1953.

Progress has been satisfactory considering the difficult working conditions. An average of slightly more than one foot per day advance has been made since Jan. 1, 1953.

It is recommended that faster and more powerful hoisting equipment be installed prior to the establishment of the drift and crosscut. Only a limited amount of muck can be handled with the current air tugger hoist. Inasmuch as the new equipment has been previously prescribed, it would be a factor favorable to both the company and the Government if it were installed.

STATEMENT OF WORK COMPLETED

Work between the periods of Jan. 7 and Feb. 4, 1953 consisted of sinking the inclined shaft an additional 38.2 feet. Total advance since the start of the project on Dec. 18, 1952 has been 42.2 feet. The depth below the 100-foot level was 94.2 feet, or approximately 6 feet above the point where the 200 foot level is to be established. Work has been progressing on a three shift basis, employing three men per shift, plus two supervisors.

Timbering of the shaft is not necessary other than cross ties supporting the inclined track and the ladders.

COMMENTS ON PROGRESS

Progress has been slow but was considered satisfactory in view of the factors involved. Water is still a major problem. A structure was intersected near the 94.2 mark which tended to drain a good portion of the flow. At the time of the last visit, only one compresor was in operating condition thus hampering operations. Inasmuch as pumping and drilling has to be carried on simaltaneously, the air pump creates a considerable drain on the air pressure necessary to operate the jackhammer. Since the surface hoist is also an air tugger, its use has to be limited to times when the other air machinery is not in too great a demand.

No mineralization was noted at the time of the visit and no samples were taken.

DISCUSSION

A station is to be established on the 200-foot level and drifts

will be advanced a short distance on either side of the shaft before sinking operations are to continue.

Henry W. Jones

Henry W. Jones
Mining Engineer

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 2 1953

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Office of
Executive Officer
DMEA Field Team
Region III

1012 Flood Building
870 Market Street
San Francisco 2, Calif.

Date: January 28, 1953

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Interim Inspection Report

Attached are four copies of Interim Report on -

Docket DMEA 2289

Contract Idm-E 467

Commodity Tungsten

Operator - Graham Development Corporation
1000 Lincoln Road
Miami Beach 39, Fla.

Property - Black Horse Mine, White Pine County, Nevada

By Henry W. Jones, Mining Engineer

Dated January 26, 1953

H C Miller

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

Attachment

Copy to: Finance Officer, Region III (With one copy of report)

E. H. Bailey, USGS (With one copy of report)

INTERIM REPORT

Docket No.: DMEA-2289 January 26, 1953

Name and address of operator: Graham Development Corp.,
1000 Lincoln Road
Miami Beach 39, Florida.

Name and location of property: Black Horse Mine, White Pine County, Nev.

Contract No.: Idm-E467

SUMMARY, CONCLUSIONS, RECOMMENDATIONS

The Black Horse tungsten mine situated in the Snake Range, about 52 miles via U. S. Highway 6 west of Ely, Nev., was inspected on Jan. 7, 1953, to check the progress under DMEA contract; starting date of the contract was Dec. 18, 1952. A starting point was established in the shaft from which all future work is to be measured. Progress applicable to the contract consisted of sinking the shaft a distance of 4.0 feet.

Progress is quite slow partially due to an inexperienced crew, inadequate hoisting equipment, and a large flow of water in the shaft.

There are no recommendations for improvement of operations at this time.

STATEMENT OF WORK COMPLETED

The Black Horse tungsten mine was visited on Jan. 7, 1953 to check the progress of work applicable to the DMEA contract. The engineer was accompanied by B. E. Rees, mine superintendent on the inspection of the mine.

The contract was signed on Dec. 18, 1952 and progress was measured from a point determined by the superintendent's records on

that date. A nail was driven in a crosstie at a point 37 feet below the tracks of the 100-foot level and 15 feet above the point of beginning. Progress applicable to the contract consisted of sinking the shaft 4.0 feet.

COMMENTS ON PROGRESS

Progress has been slow; in part due to an inexperienced crew, inadequate hoisting equipment and a large flow of water in the shaft. Ten men are employed on a 3-shift basis.

The superintendent reported that after operations begin to run more smoothly, the expected rate of sinking will be about 1 foot per 24 hours.

The inclined shaft is being sunk on an 8-foot width and a 7-foot overall height. Clearance after the installation of crossties and track is about 5 feet. Shaft timbering is not required.

The shaft is making an estimated 25 gallons of water per minute.

Plans are underway to replace the air tugger now being used for the mine hoisting with a gasoline driven, faster operating and larger capacity hoist.

No mineralization was noted and no samples were taken.

Henry W. Jones

Henry W. Jones
Mining Engineer

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

Office of
Executive Officer
DMEA Field Team
Region III

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 2 1953

1012 Flood Building
870 Market Street
San Francisco 2, Calif.

Mr. Charles R. Graham, President
Graham Development Corporation
1000 Lincoln Road
Miami Beach 39, Florida

Re: Docket No. DMEA-2289 - Tungsten
Graham Development Corporation
Black Horse Tungsten Mine
White Pine County, Nevada
Exploration Contract No. Idm-2467

Dear Mr. Graham:

We have been advised by the Washington office of the Defense Minerals Exploration Administration that the above captioned contract has been executed directly with you, instead of going through this office as is customary, in order to expedite its execution so that work could be started before the spring run-off. We are glad to include this contract with those falling under the jurisdiction of this office.

As you undoubtedly know, reimbursement for the Government's share of the cost of the exploration is made monthly upon receipt of MF 104 and MF 104A forms which we supply to you. A supply of these forms is enclosed.

When filled out, four copies of each of the forms should be sent directly to Mr. A. C. Johnson, Chief, Mining Division, Bureau of Mines, P. O. Box 1551, Reno, Nevada. Upon approval of the statement, Mr. Johnson will forward all copies to this office for certification and payment by the U. S. Treasury in San Francisco.

Periodic inspections of the work being done under the contract will be made by engineers from Mr. Johnson's office.

When additional forms are needed kindly request them of Mr. Johnson.

Sincerely yours,

N. C. Miller
Executive Officer, DMEA Field Team
Region III

H.C.Miller:mpp
Files
Chron

Enclosures

Copy to: DMEA, Washington
E. H. Bailey, USGS
A. C. Johnson, Reno, Nevada
Finance Office, Region III

FILE COPY
SURNAME:

Rutledge
Selfridge
Crabtree
F. Johnson

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

DEC 19 1952

Mr. Charles R. Graham, President
Graham Development Corporation
1006 Lincoln Road
Miami Beach 39, Florida

Re: Docket No. DMEA 2289 - Tungsten
Graham Development Corporation
Black Horse Tungsten Mine
White Pine County, Nevada
Exploration Contract No. Idm-N467

Dear Mr. Graham:

Enclosed is your copy of the above referenced contract dated December 18, 1952.

The Field Team's copy has been forwarded to Mr. E. C. Miller, Executive Officer, Region III, 1012 Flood Building, 870 Market Street, San Francisco 2, California, who will contact you or your representative and furnish forms and instructions for submitting the monthly cost reports.

Sincerely yours,

SIGNED

Administrator

S.H.
12-19-52

FARutledge:lm
12/19/52

cc: Admn. Reading File
Docket
R. W. Geehan, USBM
D. M. Lemmon, USGS
Field Team Reg. III
Operating Committee
G. S. Selfridge
F. A. Rutledge

Rutledge'lm
12/19/52

FILE COPY
SURNAME:

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

cc: Admr. Reading File
Docket
R. W. Geehan, USBM
D. M. Lemmon, USGS
Operating Committee
Field Team Reg. III
G. C. Selfridge
F. A. Rutledge

Rutledge
G. C. Selfridge

DEC 19 1952

Mr. N. C. Miller
Executive Officer, Region III
1412 Flood Building
870 Market Street
San Francisco 2, California

Re: Docket No. DMEA 2289 - Tungsten
Graham Development Corporation
Black Horse Tungsten Mine
White Pine County, Nevada
Exploration Contract No. Idm-1467

Dear Mr. Miller:

We are enclosing the "Finance Officer's Copy", the "Field Team's Copy", and an extra copy of the above-referenced contract for distribution.

This contract was sent direct to the Operator for signature, before being signed by the Government, to expedite its execution. Mr. Graham, President, Graham Development Corporation, 1000 Lincoln Road, Miami Beach 39, Florida, had advised the Administration that only a short period remained in which to work before the spring runoff.

Please note that the exploration program has been changed from that requested, consisting of three stages at a cost of $51,380.00, to a single stage at a total cost of $17,120.00. This was agreed to by the Operator in a letter dated December 2, 1952.

We have advised Mr. Graham that your office will contact the Corporation and discuss the contract and furnish the proper forms necessary for submission of the monthly reports.

Sincerely yours,

(signed) FRANK E. JOHNSON (JHB)

Chairman, Operating Committee

F.A.R. 12-19-52

Enclosures

Approved:

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

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

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39, FLORIDA

TELEPHONE 5-0921

Information required in the contract:

The Graham Development Corporation is a Florida corporation.

Article 2. Both Claims are recorded in Book 123, Page 428, County Recorders Office, White Pine County, Ely, Nevada.

Article 3. The work will be started on Jan. 4, 1953, or as soon thereafter as the contract can be signed.

Charles R. Graham

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39, FLORIDA

TELEPHONE 5-0921

December 16, 1952

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 17 1952

Attention: Mr. C. O. Mittendorf
Reference: Docket No. DMEA 2289 - Tungsten

Dear Sir:

We inclose the six signed copies of the Exploration Project Contract. The contract is satisfactory to the Graham Development Corporation.

We would like to start the work under the contract on January 4, 1953. If the contract cannot be signed by this date, then we will start the work as soon as we are notified that the contract has been signed.

Thanking you for your consideration, we are

very truly yours

GRAHAM DEVELOPMENT CORPORATION
Charles R. Graham
Charles R. Graham, President

467

FILE COPY 400
SURNAME:

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

Rutledge
Selfridge
Hedges
Ellis

AIR MAIL

DEC 12 1952

Mr. Charles H. Graham, President
Graham Development Corporation
1000 Lincoln Road
Miami Beach 39, Florida

Re: Docket No. DMEA 2289 - Tungsten
Graham Development Corporation
Black Horse Tungsten Mine
White Pine County, Nevada

Dear Mr. Graham:

We are enclosing the original and five copies of the above referenced exploration contract, together with Exhibit "A" (1 page) and one map.

If the terms and conditions of this contract are satisfactory to you, all six copies should be signed and returned to this office. Upon receipt of the data requested in our letter of December 4, 1952, we will complete the execution of the contract and the Operator's copy immediately will be returned to you with the effective date of the contract. Any work prior to the execution date of the contract cannot be included in the costs to which the Government will contribute.

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

Please note that the only major change from the revised program contained in your letter of November 24, 1952, is the addition of an item of $180.00 for analyses. This has increased the proposed contract from $16,940.00 to $17,120.00.

Under Article 3, the starting date has been left blank and is to be filled in when the contract is signed by you.

Sincerely yours,

C. O. Mittendorf (fw) J.H. 12-12-52

Administrator

FARutledge'lm
12/10/52

cc: Admn. Reading File
Docket
R. W. Geehan, USBM
D. M. Lemmon, USGS
Field Team Reg. III
Operating Committee
G. C. Selfridge
F. A. Rutledge
Enclosures

FILE COPY 400
SURNAME:

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

Operating Committee, DMEA

December 10, 1952

Rutledge
Selfridge

Iron and Ferro-Alloy Division, DMEA

Docket No. DMEA 2189 - Tungsten
Graham Development Corporation
Black Horse Tungsten Mine
White Pine County, Nevada

The subject contract is being sent direct to Mr. Charles R. Graham, President, Graham Development Corporation, Miami, Florida, for signature instead of being routed through the field team. Certain data ~~is~~ are lacking, but have been requested and will be added to the contract before signature by the Government.

This information was requested in our letter of December 4, 1952, to Mr. Graham and consists of the following:

1. The book and page number for each recorded location notice. Location of recording office.

2. The state in which the Graham Development Corporation is incorporated.

George C. Selfridge

G. C. Selfridge, Chief
Iron and Ferro-Alloy Division

FARutledge'lm
12/10/52

cc: Admn. Reading File
Docket
G. C. Selfridge
F. A. Rutledge

J.H.
12-12-52

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39 FLORIDA

TELEPHONE 5-0921

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 11 1952

December 9, 1952

GCS
12/12/52

DEFENSE MINERALS EXPLORATION ADMINISTRATION
U. S. Department of the Interior
Washington 25, D. C.

Attention: Mr. G. C. Selfridge, Chief
Iron and Ferro-Alloys Division
Reference: Docket No. DMEA 2289 - Tungsten
Your letter of December 4, 1952

Dear Sir:

This will answer your letter of December 4, 1952 regarding Gold King Claims 1 and 2, where our Black Horse Tungsten mine is located.

Both claims are recorded in Book 123, Page 428, County. Location of the recording office is White Pine County, Ely, Nevada.

Graham Development Corporation is a Florida corporation. We have certificates of authorization to transact business in the states of Nevada and Indiana.

Sincerely yours

GRAHAM DEVELOPMENT CORPORATION

Charles R. Graham

Charles R. Graham, Pres.

FILE COPY
SURNAME:

140

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

AEKane

December 9, 1952

NSINR&R

Memorandum

To: Administrator

Through: G. C. Selfridge

From: Chief Counsel

Subject: Graham Development Corporation - Docket No. DMEA-2289 (Tungsten)

There is attached in satisfactory legal form for execution, a contract covering the above-described project, subject to (1) the insertion in the opening paragraph of the state of incorporation of the Operator corporation (2) the insertion in Article 2, of the book and page number and place of recording of the two claims therein referred to, and (3) attachment of the map referred to in Exhibit "A".

The lease in this case expires September 1, 1955, but the Operator has an option to purchase the property.

J. L. Hofflund

J. L. Hofflund
Chief Counsel

Attachment

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

FILE COPY 400
SURNAME:

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

Chief Counsel, DMEA

December 5, 1952

Ratledge
Selfridge

Iron and Ferro-Alloy Division, DMEA

Review and preparation of Exploration Project Contract
Docket No. DMEA 2289 - Tungsten
Graham Development Corporation
Black Horse Tungsten Mine
White Pine County, Nevada

y. s. in R. & R.

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

The book and page number of each recorded location notice, the location of the recording office, and the state in which the corporation was incorporated are missing. Since the contract will be sent to Florida for signature by Charles R. Graham, President, Graham Development Corporation, before the contract is signed by the Government, this information will be added at the time of signing by the Government.

The old form of "Landlord's Subordination Agreement" is recommended for use for the following reasons:

1. Application dated December 11, 1951.

2. Landlord's Subordination Agreement dated March 13, 1952.

3. Graham Development Corporation had to increase the agreed purchase price for the claims from $4,500.00 to $10,000.00 before they could secure the present form.

4. Pressure on DMEA to expedite the preparation of the contract.

FARatledge'lm
12/5/52

G. C. Selfridge, Chief
Iron and Ferro-Alloy Division

cc: Admn. Reading File
~~Docket~~
G. C. Selfridge
F. A. Ratledge

FILE COPY 400
SURNAME:

Rutledge
Selfridge
Johnson

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

AIR MAIL

DEC 4 1952

Mr. Charles R. Graham, President
Graham Development Corporation
1000 Lincoln Road
Miami Beach 39, Florida

Re: Docket No. DMEA 2239 - Tungsten
Graham Development Corporation
Black Horse Tungsten Mine
White Pine County, Nevada

Dear Mr. Graham:

Your letter of December 2, 1952, has been received, and we are proceeding with the processing of your application.

However, we need the following information which we would appreciate your furnishing at your earliest convenience.

1. The book and page number for each recorded location notice. Location of recording office.

2. The state in which the Graham Development Corporation is incorporated.

Sincerely yours,

Signed

G. C. Selfridge, Chief
Iron and Ferro-Alloy Division

12-4-52

FARutledge'lm
12/4/52

cc: Admn. Reading File
Docket
R. W. Geehan, USBM
D. M. Lemmon, USGS
Field Team Reg. III
G. C. Selfridge
F. A. Rutledge

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39 FLORIDA
TELEPHONE 5-0921

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 3 1952

December 2, 1952

DEFENSE MINERALS EXPLORATION ADMINISTRATION
U. S. Department of the Interior
Washington 25, D. C.

Attention: Mr. C. O. Mittendorf
Reference: Docket DMEA 2289 Tungsten

Dear Sir:

The program outlined in your letter of November 28, 1952 is satisfactory to the Graham Development Corporation. We are prepared to start the work as soon as we can get authorization from the government to proceed.

We inclose five copies of ammendments to our application Form MF 103 which incorporate the proposed changes.

Very truly yours

GRAHAM DEVELOPMENT CORPORATION
Charles R. Graham
Charles R. Graham, Pres.

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39, FLORIDA

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 3 1952

TELEPHONE 5-0921

December 2, 1952

Reference: Docket DMEA 2289
Supplement to Form MF 103, dated December 11, 1951

This sheet supersedes sheet 3 of the origonal application and Sheet 3, Phase I, Sheet 3, Phase II and Sheet 3, Phase III of the ammendments dated May 6, 1952.

3. (a) It is proposed to sink the present Black Horse shaft an additional 72 feet to reach the 200 ft level and provide a sump. A total of 250 feet of exploratory drifting and crosscutting will be done at this level. Estimated cost of the work is $ 16,940.

(b) It is proposed to start the work immediately and complete the work within six months.

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39, FLORIDA

TELEPHONE 5-0921

December 2, 1952

Reference: Docket DMEA 2289
Supplement to Form MF 103, dated Dec. 11, 1951

This sheet supersedes Sheets 6, 7, 8 and 9 of the origonal application, and ammends Sheets 6R, 7R and 8R of the ammendments to the application dated May 6, 1952.

Estimated cost of the proposed project:

Operation	Footage	Cost/ft	Total cost
Sink Shaft	72 Ft.	$ 100.	$ 7,200.
Cut Station at 200' Level			490.
Drift and crosscut	250 Ft.	37.	9,250.
		Estimated Total Cost	$ 16,940.
		Proposed Government Participation	$ 12,700.
		** Operators participation	4,240.

** If costs prove to be in excess of the estimates, The Graham Development Corporation will agree to absorb the excess cost over and above the estimates, and also the costs necessary to get the work started.

FILE COPY
SURNAME:

Selfridge

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

Air Mail

NOV 28 1952

Mr. Charles R. Graham, President
Graham Development Corporation
1000 Lincoln Road
Miami Beach 39, Florida

Re: Docket No. DMEA 2289 - Tungsten
Black Horse Tungsten Mine
White Pine County, Nevada

Dear Mr. Graham:

This is to acknowledge receipt of your letter of November 24, 1952, discussing our letter of November 12.

If agreeable to you, I shall instruct the Iron and Ferro-Alloy Division to draw up a contract for final approval which would allow for 72 feet of shaft sinking, a station, and 250 feet of drifting and crosscutting at the proposed 200 foot level, as suggested in your letter. The contract would allow for shaft sinking at $100 a foot, a station at $490, and drifting and crosscutting at $37 a foot. Government participation would amount to approximately $12,700. This amount of exploration would allow you to learn whether or not the vein exists on the footwall side of the fault and whether or not the metal content of the vein increases with depth on the hanging wall side of the fault.

Sincerely yours,

C. O. Mittendorf (fw)

Administrator

J.N.
11-28-52

CC: Docket
Admn. Read. File
G. C. Selfridge
Field Team, Reg. 3
D. M. Lemmon, USGS
R. W. Geehan, USBM

GCSelfridge:ls
11/28/52

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 25 1952

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39 FLORIDA

TELEPHONE 5-0921

November 24, 1952

DEFENSE MINERALS EXPLORATION ADMINISTRATION
U. S. DEPARTMENT OF THE INTERIOR
Washington 25, D. C.

Attention: Mr. C. O. Mittendorf
Reference: Docket No. DMEA 2289 Tungsten

Dear Sir:

In reference to your letter of November 12, 1952, regarding government participation in our Black Horse tungsten project, we feel that we must decline your proposal for the following reasons:

honest difference of opinion

1. We believe that the project has merit without first investigating the vein on the west side of the fault, and we believe that your field investigators more or less confirmed this opinion when they discussed it with our engineer in October.

2 shifts 1 month at most

2. Water flow into the mine at present is minimum, making conditions best for shaft work. If we spend two months at the 120 level west of the fault and then wait more months for a decision on continuance from the government, we might have to work on the shaft in the spring when water flow is maximum and the work is considerably more costly. We couldn't come within $ 50 of your price of $ 100/ft for shaft work during the spring, but between now and the end of February, we might be able to approach that figure exclusive of overhead and equipment rental.

Therefore, we believe it would be a mistake to delay the shaft work any longer unless we decide to abandon the project entirely. Since last May when your field team was at our mine, we have accomplished much towards increasing the chance of success of the operation as follows:

a. We have installed a second compressor and pump so that we can operate the drills and pumps at the same time.

see f.t. letter of Oct 10, page 4.

b. We have installed two buildings for the protection of our men and equipment from possible severe snows.

c. We have mined over 100 tons of ore at the 100 ft. level with about $1\frac{1}{4}$ % WO_3 content, and we have more in sight as soon as we can make arrangements to sell the ore in our present stockpile.

68' of backs

Our revised docket dated 7/29/52 calls for only 72 feet of shaft to reach the 200 ft level and provide a sump. With 250 feet of drifting and crosscutting, the cost to the government for 75% participation at your unit cost allowances, would be only $ 12,705 as compared to $ 18,000 to do the work proposed in your letter of November 12.

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39 FLORIDA

TELEPHONE 5-0921

If the government cannot go along with us to the extent of $ 12,705, we would like to know if the government would be willing to participate to some lesser extent, possibly 60% for a total of $ 10,164. Then we would not charge the government for any of the work until the project is completed or a discovery is certified. This would eliminate considerable paperwork and save the government the risk of loss in the event that the Graham Development Corporation does not complete the contract.

If there is no possibility of any government participation other than under the terms of your Nov. 12 letter, we would greatly appreciate it if you could send us the complete reports of your field examination so that we might determine whether or not we should abandon the mine.

Thanking you, we remain

very truly yours

GRAHAM DEVELOPMENT CORPORATION

Charles R. Graham

Charles R. Graham, President

FILE COPY
SURNAME:

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

Administrator,

November 12, 1952.

Selfridge.

Iron and Ferro-Alloy Division, D.M.E.A.

Docket No. DMEA 2289 - Tungsten
Graham Development Corporation
1000 Graham Road
Miami Beach 39, Florida

The subject application was received December 14, 1951. Referral to the field team was held in abeyance until March 27, 1952, or until receipt of the executed Landlord's Subordination Agreement. The property was examined April 28 and 29 and the examination report was received August 25, cleared by the Operating Committee August 29, and commented upon by Mr. D. M. Lemmon of the Survey on September 8, and by Mr. R. W. Geehan of the Bureau of Mines on September 15.

Because the proposal was deemed out of line with the target, additional information was requested from the field team on September 22. On October 29 we telegraphed the field team and on November 5 we received a letter, dated October 10, relating to the inquiry of September 22.

The applicant originally proposed a project costing $56,200, which was later reduced to $51,380, to explore a prospect secured by a lease and option for the purchase of two claims for $4,500. This was later changed to $10,000. The applicant set forth his proposal in three stages as shown by Fig. 3 of the field report.

The first stage called for sinking the shaft an additional 72 feet at $125.00 a foot, cutting a station at $490.00, and drifting 200 feet at $37.00 a foot on the new level, the proposed 200, at a total cost of $16,890.00. The field engineers estimated that this work might indicate 1200 tons of 0.5 percent ore or 600 units of WO_3. Thus the exploration cost would be approximately $28.00 a unit or $14.00 a ton.

Stage II called for 150 feet of crosscutting and drifting to locate and explore the vein on the footwall side of the Black Horse fault. At $37.00 a foot this amounted to $5,550.00.

Stage III called for 100 feet of additional shaft at $157.00 a foot, 200 feet of drift to the east at $37.00 a foot, and 150 feet of crosscutting and drifting to the west at $37.00 a foot, or a total cost of $28,940.00. If no ore were found on the footwall side of the fault, the shaft sinking and drifting to the east as considered by the field engineers might indicate 900 tons of ore averaging 0.50 percent WO_3 or 450 units of WO_3. The estimated cost of the shaft sinking and drifting to the east is $22,390.00 or approximately $50.00 a unit or $25.00 a ton for exploration alone.

The reserves were calculated at an average grade and width of 0.5 percent WO_3 and 1.0 foot respectively. This type of mineralization is too narrow and low grade to be mineable. The field report gives no geologic information upon which to base hopes for larger ore bodies. The letter of October 10, received November 5, states that it is unlikely that a detailed stratigraphic study would yield information that would help predict the size of the ore bodies at depth.

Previous operations have been poorly planned and proposed costs are high. Previous exploration and development, amounting to 156 feet of shaft, 735 feet of drifts and crosscuts, and 111 feet of raises, permitted the mining and recovery of 403 units of WO_3 contained in 630.5 tons of ore estimated to average 2.2 percent WO_3. The application states 528 units in 60 percent concentrates from ore estimated to average 1.35 percent WO_3. The field engineers' Fig. 3 shows 1700 tons of indicated ore in the block of former workings. This is little more than the 2100 tons of inferred ore also shown. By analogy, one might expect to high grade the inferred ore blocks and with a 60 to 75 percent recovery, instead of a 35 percent one, recover say 800 units of WO_3. At this figure it doesn't seem worthwhile.

All the information at hand suggests that the application should be denied. However, the applicant has undoubtedly had several interviews with the field men and some encouragement may have been given. Informal discussion with the Survey commodity analyst suggested that D.M.N.A. was committed to some kind of program as so much time has passed since submittal of the application. Therefore, the counterproposal. The presence of ore on the footwall side of the fault would lessen over-all exploration tonnage cost so that the sinking might be more feasible than it now appears.

G. C. Selfridge, Chief
Iron and Ferro-Alloy Division

GCSelfridge:ls 10/12/52

CC: Docket
Admn. Read. File
G. C. Selfridge

FILE COPY
SURNAME:

Selfridge

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

NOV 12 1952

Mr. Charles R. Graham, President
Graham Development Corporation
1000 ~~Collins~~ Ocean Road
Miami Beach 39, Florida

Re: Docket No. DMEA 2289 - Tungsten
Gold King Mine
White Pine County, Nevada

Dear Mr. Graham:

This is to supplement our letter of November 6 to you in reply to your letter of October 28 making inquiry as to the status of your application.

After receipt of the field team report in Washington, study of it and your application engendered grave doubts as to the feasibility of the project as proposed under the geologic and operating conditions existing at the mine. For this reason the application was again referred to the field for additional information. This has now been received and we have reached certain tentative conclusions regarding the property and wish to suggest to you for your consideration an alternative program in which the Government would participate.

We believe that it is important to know whether or not the vein exists on the west side of the Black Horse fault before sinking the shaft further. This can be easily determined by extending the 120-foot level westward for 15 or 20 feet and then crosscutting in the direction that seems more favorable. Possibly 100 feet of work at this elevation should give the answer.

If the above exploration indicates that further work is warranted at depth and is approved by the Government, we suggest that the shaft be sunk approximately 105 feet to establish the proposed 200 level and leave a 15-foot sump. Subsequently 250 feet of drifting and/or crosscutting would be done at the new level to investigate the vein on both sides of the fault.

We further propose that the Government participate to the extent of 75 percent in an estimated cost of $37.00 a foot for drifting and $100.00 a foot for sinking. Items for the rehabilitation of the 120 level west and for a small station at the new level would be included.

The estimated cost of the above proposed program would be approximately $24,000.00, in which the Government would participate to the extent of 75 percent, or $18,000.00. Monthly participation by the Government would be determined by the actual number of feet driven at the unit prices quoted above. Costs above these would be for the sole account of the Company.

May we have your comments or suggestions on the above-mentioned proposal?

Sincerely yours,

C. O. Mittendorf (fw)

Administrator

S.H. 11-12-52

GCSelfridge:ls 11/10/52

Copy to: Admn. Read.File
Docket
Field Team, Reg. 3
G. C. Selfridge
D. M. Lemmon, USGS
R. W. Geehan, USBM

FILE COPY
SURNAME:

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

Selfridge

NOV 6 1952

Mr. Charles R. Graham, President
Graham Development Corporation
1000 Lincoln Road
Miami Beach 39, Florida

Re: Docket No. DMEA 2289 - Tungsten
Black Horse Tungsten Mine
Graham Development Corporation
White Pine County, Nevada

Dear Mr. Graham:

This is to acknowledge receipt of your letter of October 28 making inquiry as to the status of your application.

As soon as we received your letter, we telegraphed the field team asking when we might receive the additional information we requested on receipt of the field team report covering the examination of the subject property. We have just been advised that the additional information is being air mailed to us. As soon as we receive it, we shall write you.

We wish to assure you that the lack of demand of tungsten is not responsible for the delay. On receipt of the field examination report which omitted some items in which the Washington office was interested we requested further data, and the delay has been due to the securing of the requested data.

Sincerely yours,

George C. Selfridge

G. C. Selfridge, Chief
Iron and Ferro-Alloy Division

GCSelfridge'lm
11/6/52

cc: Admn. Reading File
Docket
R. W. Geehan, USBM
D. M. Lemmon, USGS
Field Team Reg. III
G. C. Selfridge

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 5 1952

11/7/52

Office of
Executive Officer
DMEA Field Team
Region III

1012 Flood Bldg.
870 Market St.
San Francisco 2, Calif.

Nov. 3, 1952

Air Mail

Memorandum

To: Frank E. Johnson, Chairman, Operating Committee, DMEA, Interior Building, Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-2289 (Tungsten), Graham Development Corp. Black Horse Tungsten Deposit, White Pine County, Nevada

In answer to your teletype dated October 30, 1952, four copies of a letter from Mr. R. M. Smith, Geological Survey, to Mr. E. H. Bailey, dated October 10, are attached. This letter takes up and answers the different items that were brought up in your letter of September 22.

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

Attachment

Copy to: E. H. Bailey

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Room 208 - 222 So. W. Temple
Salt Lake City 1, Utah
10 October 1952

Mr. Edgar H. Bailey
U. S. Geological Survey
102 Old Mint Building
San Francisco 3, California

Dear Edgar: Subject: DMEA Docket 2289

In accordance with your request of September 29, 1952, the following appraisal of suggestions concerning the proposed exploratory program at the Black Horse Mine, White Pine County, Nevada, was prepared. The items are in the same order as in Mr. Frank E. Johnson's letter of September 22 to Mr. H. C. Miller:

1. Suggestion to explore for the faulted segment of the vein beyond the Black Horse fault on the 120-foot level.

   This method would require rehabilitation of the 120-foot level consisting of laying track, pipe, and timbering or filling the underhand stope. 65 feet of track 11' long 3' deep bridge.

   Drifting on the proposed 200-foot level (Phase 1) has, as its objective, exploration of the vein on the east (hanging-wall) side of the Black Horse fault. This work is not dependent upon finding the faulted segment on the west (footwall) side of the fault. The extension of the shaft proposed in Phase 1 will cut the fault and extend into the footwall of the fault on the 200-foot level. This work will be done regardless of finding the faulted segment on either level. The 200-foot level site for Phase 2 exploration will eliminate the need for rehabilitating and extending the 120-foot level, ?? and will, therefore, be a less expensive method. Concerning Phase 2, the applicant considers that the faulted segment will be found within 75 feet of the shaft, but as the direction of displacement is not known he has allowed 150 feet of crosscut, 75 feet each way, in case the first crosscut is in the wrong direction. Although it is unlikely that more than 20 or 25 feet of crosscutting will be necessary, it is better to allow too much footage rather than too little. No penalty will accrue if the total footage allowed is unused, but a considerable delay will result OK

from an under-estimation because a new application would be necessary to do the work. Exploration for the faulted segment by long-hole percussion drilling is not recommended because, near the faults, the veins are more irregular and may be narrower than they are elsewhere. A small amount of quartz in the drill cuttings could be from either the vein or a barren stringer not associated with the vein. Because of the spotty distribution of scheelite in the veins, it would be fortuitous if the hole encountered scheelite, whereas lack of scheelite in the cuttings would probably result in one of two conclusions:

(a) That the vein was not cut -- a conclusion that could be either right or wrong -- or,

(b) That the information yielded by the hole is inconclusive and a crosscut is necessary.

Exploration for the faulted segment by diamond drilling is not recommended because the cost per foot for a small job in an isolated area approaches the cost of crosscutting.

2. Suggestion to make Phase 1 contingent upon Phase 2. The inferred ore which might be found by Phase 1 (fig. 3) is the primary objective of the exploratory work and should be done first and without regard to the faulted segment. In Phase 1, 1,200 tons is expected to cost $16,890 in exploratory sinking and drifting, a more reasonable ratio than results when the total estimate is divided by the total inferred tons. 28.00/unit

Phase 3 of the proposed work is contingent upon the success of Phases 1 and 2. This means that if Phase 2 reveals ore, the total tonnage objective of Phase 3 will be 900 tons of inferred ore in the hanging wall of the fault plus the ore found by Phase 2. Thus the cost per unit of WO_3 will be smaller here, also, than appears at first glance. In the event that either Phase 1 or Phase 2 reveals less ore than necessary to justify the remaining phases, government participation will be terminated.

At a conference in Reno, Nevada, Oct. 8, 1952, the applicant stated that he is willing to install a larger hoist and skip, and that an additional compressor (325 c.f.m.) has been installed, but he contends that no reduction in his estimated cost can be made. This contention is based on two factors:

(a) The estimated cost of shaft sinking is higher than the average for the region because the shaft is wet, and from 25 to 50 gallons of water per minute must be pumped.

pound water on 100 L.?

(b) Although some saving in cost will result from installation of larger equipment, this saving is offset by recent increases in operating costs.

3. Suggestion to drift 50 feet on the second vein (Sample BM 4). This work is considered to be less likely to reveal a significant tonnage than work on the main vein. Indicated ore at this showing of the vein is about 2 tons, but it is inferred that 30 tons containing 1.3 percent WO_3 may be present in the block 50 feet long, 1 foot wide and 7 feet high above the 100-foot level. In the event that Phases 1, 2 and 3 are successful, this work may be justified, but I cannot recommend that it be included in the contract.

4. Suggestion to do more detailed surface mapping. No map of surface geology was included in the report as the mine area contains few exposures; most of the area is covered by alluvium. The strikes and dips of the beds can be more accurately determined underground. Efforts to determine the displacement along the Black Horse fault from surface mapping were unsuccessful because of poor exposures in critical areas. It is concluded, therefore, that a revisit is not warranted. If more geologic data is required during the course of a project, then it is suggested that either the company hire a consultant to do the mapping, or we should provide for mapping as part of the project.

what about superintendent?

5. Suggestion that there may be lithologic control of the size of the ore bodies. As the veins are vertical and parallel the bedding, it is considered to be unlikely that a detailed stratigraphic study

would yield information that would help predict the size of the ore bodies at depth.

6. The rocks in the mine are slightly schistose carbonaceous shale and limy shale, and the veins are composed of quartz and calcite. The vein material drills hard, the wall rock drills soft, and the ground is tight and difficult to pull, partly because drifting is parallel to the bedding.

7. No timbering will be required in the shaft, except ties and occasional stulls with headboards or caps.

8. The inclination of the shaft is 60° west, and the depth is 156 feet. As line A-A' is parallel to the bearing of the shaft (fig. 2), the longitudinal section (fig. 3) shows the true inclination and depth of the shaft.

The estimated costs are higher than the average for this type of work as a result of at least four factors:

(a) The shaft makes 25 to 50 gallons of water per minute.

(b) There are no housing facilities and the operator plans to commute to Ely - 54 miles of travel each way daily.

(c) The equipment is small and inadequate.

(d) Neither the applicant nor his supervisory representatives appear to have more than a limited amount of experience in underground mining.

The examining engineers and geologists discussed the proposed work with the applicant and made suggestions, many of which were adopted. These suggestions were, in general, modifications of the applicants original proposals which revised them as little as possible. This tendency to go along with the applicant as far as possible may be open to criticism, but reflects my interpretation of the Defense Production Act and subsequent procedural instructions that the intent of DMEA is to evaluate the operator's proposals and,

as far as practicable, to approve or deny government assistance on that basis. In the case of the Black Horse Mine, it is entirely fair to criticize past operations, and to suspect that future operations will also be inefficient. As pointed out in the report (p. 8) there is little chance that the loan will be repaid, but there is a good chance that several hundred units of WO_3 will be produced. If it is in the national interest to produce tungsten under these conditions, the loan should be approved; if not, it is suggested that the loan be denied on the basis that it is unlikely that the total production will be 20 times the exploration cost, as is necessary to obtain full repayment. In the event of approval, the extent of government participation should be controlled by making payments on a footage basis, and by refusal to approve expenditures beyond those specified in the contract either by letter or by implication.

— no, low grade & narrow veins so high unit cost

Sincerely yours,

Roscoe

R. M. Smith

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 4 1952

378 WA SFS /I-BOM/

SAN FRANCISCO CALIF 11-3-52 325P

FRANK E JOHNSON, CHAIRMAN OPERATING COMMITTEE

DMEA, INTERIOR BLDG, WA

SUBJECT DOCKET DMEA 2289 TUNGSTEN, GRAHAM DEVELOPMENT CORP. WHITE PINE COUNTY, NEVADA REURTT OCTOBER 30. REPORT BEING AIR-MAILED TO YOU TODAY.

H C MILLER EXEC OFCR DMEA FLD TEAM REGN III

DMEA 2289 30

JC 326P

NOV 4 1 06 PM '52
BUREAU OF MINES
MAIL ROOM
WASHINGTON, D C.

FILE COPY
SURNAME:

Selfridge.
F. E. Johnson

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

DEFENSE MINERALS EXPLORATION ADMINISTRATION
G. C. SELFRIDGE
3598

14X3923.970 Interior - DMEA 5284

OCTOBER 29, 1952

N. C. Miller, Executive Officer, DMEA Region 3, 1012 Flood Bldg.
870 Market Street, San Francisco 2, California
Docket DMEA 2289, Tungsten, Graham Development Corporation, White Pine County, Nevada

Recurlet September 22 making inquiry relating to subject project, please wire when we may expect answer.

(signed) FRANK E. JOHNSON

Frank E. Johnson
Chairman, Operating Committee

F.E.J.
10-30-52

GCSelfridge:ls 10/29/52

cc: Confirmation to Miller
Docket
Audits
Admn. Read. File
G. C. Selfridge
F. E. Johnson
Operating Committee

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39 FLORIDA
TELEPHONE 5-0921

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 28 1952

Defense Minerals Exploration Administration
Bureau of Mines
Washington, D. C.

Re: DMEA 2289 X Tungsten

Dear Sirs

Because water conditions are presently favorable at our Black Horse tungsten mine, White Pine County, Nevada, we are anxious to proceed with the shaft sinking operations as soon as possible. If we cannot get started by November 20, it may not be possible to complete Phases I and II of the project before the water flow increases in the spring.

Therefore, would you please let us know if we can expect a decision by November 20. If not, we plan to go ahead with a portion of the project on our own.

In any event, could you tell us what is currently holding up the decision. If lack of demand for tungsten is responsible, we would like to know. We dont want to repeat our mistake of World War II when we lost a lot of money when the price dropped below our cost.

It will be very unfair if you hold us up on this project until such time as foreign tungsten supplies put us out of the market again.

Sincerely yours

GRAHAM DEVELOPMENT CORPORATION

Charles R. Graham

Charles R. Graham, Pres.

Tha

FILE COPY 400
SURNAME:

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

Chairman
Selbridge
Res Mattesday

AIR MAIL

SEP 3 0 1952

Mr. H. C. Miller
Executive Officer, Region III
1012 Flood Building
870 Market Street
San Francisco 2, California

Re: Docket No. DMEA 2289 - Tungsten
Black Horse Tungsten Mine
Graham Development Corporation
White Pine County, Nevada

Dear Mr. Miller:

We have carefully reviewed the application, the report of the field team and the proposed contract on the above noted property. It appears to us that the cost ($51,380.00) of the proposed work is too high for the possible production of tungsten. Before proceeding with the application, we would appreciate your opinion and that of the applicant on the following suggestions:

1. On the 120-foot level cut through the Black Horse fault for 5 or 10 feet and then crosscut to find the faulted segment of the vein. This might be done with long drill holes.

2. If the vein is located, then sink the shaft 118 feet or to a vertical distance of 100 feet below the 120-foot level. For this work, a larger gasoline hoist should be rented and buckets should be used in sinking to speed up the work and reduce the cost. Using a skip and the small 9 H.P. air hoist would delay the sinking operation and increase the cost correspondingly.

3. Include up to 50 feet of drifting on the second vein (in the crosscut on the 100-foot level) from which sample B-4 was taken.

4. Are there sufficient exposures so that a geological study and mapping would help in finding the possible throw of the Black Horse fault?

5. Is it possible that a study of the stratigraphy would indicate the probability of an increase in the size of ore bodies on depth?

6. Please advise us of the type of rock in which the work would be done. Is it difficult to drill and break?

7. How much timbering would be done in the shaft?

8. What is the inclination of the shaft?

The costs appear to be high. Such items as accounting, powder, fuse and caps, fuel, oil and other supplies are much higher than the average for this type of work.

Sincerely yours,

ce
9-22-52

(signed) FRANK E. JOHNSON

Chairman, Operating Committee

Approved:

J. H. Hedges

Member, Bureau of Mines

T. P. Thayer

Member, Geological Survey

TLChapman'lm
9/17/52

cc: Admn. Reading File
Docket
R. W. Geehan, USBM
D. M. Lemmon, USGS
Field Team Reg. III
Operating Committee
G. C. Selfridge
T. L. Chapman

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

September 15, 1952

Memorandum

To: George C. Selfridge, DMEA

From: Robert W. Geehan

Subject: DMEA 2289 Tungsten
Black Horse Tungsten Deposit
Graham Development Co.
White Pine County, Nevada

Proposal: A three phase exploration project, total cost $51,380.

General: The Field Team has recommended approval. They estimate 2,100 tons of ore may be developed, with the rather high grade of about 1.3 percent WO_3.

Recommendation:

The amount of money is out of line with the amount of ore. It is evident that the 3 phase nature of the work will not help this situation unless the ore zones are wider or more numerous than is indicated.

It is recommended that this proposal be modified to give a greater vertical distance between exploration drifts and to provide for investigation of the area near sample BM 4. The contract should provide for 2 phase work on this basis. If possible, geologic mapping should precede the work and be maintained as work is in progress. DMEA should insist on well planned and executed work.

Robert W. Geehan

Robert W. Geehan

RE: DMEA 2289

9/15/52

Mr. Selfridge:

Mr. Shaw of Representative A. J. Sabath's office phoned re Graham Development Co. & said Congressman had called from Chicago requesting the case be expedited and an explanation furnished why when the field report went to San Francisco on June 16 recommending the loan that Washington had not yet said "yes".

I suggested Mr. Shaw talk with Mr. Martin, but he specified he would prefer discussing the case with you and would like for you to phone him when you return from the Administrator's office.

Mr. Shaw queried me directly as to the "why" for the hold-up, and I advised I could not give him any details on the status of the case, but that our card record showed receipt of the field report in Washington on August 25, and the normal procedure followed with all applications was for such field reports to be referred to the Geological Survey and the Bureau of Mines for analyses and recommendations before DMEA made its determination - however, you would no doubt be able to answer all his questions when you phoned him.

L. Scott

Mr. Chapman has this file.

Mr. Lemman has given me a memo on F.T. report - but Mr. Geehan hasn't - so Mr. Chapman went down to Geehan's office & asked him to expedite his comments.

Mrs Hammer

3538

IN REPLY REFER TO:
G-MD-CF

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

September 8, 1952

Memorandum

To: George C. Selfridge, DMEA

From: D. M. Lemmon, USGS

Subject: Field Report DMEA 2289 - Tungsten
Black Horse Tungsten Deposit
Graham Development Corp.
White Pine County, Nevada

The Black Horse mine was examined in April 1952 by Roscoe M. Smith and John Powers of the Geological Survey and Russell R. Trengove and Leopold F. Muller of the Bureau of Mines. A report by Smith and Trengove, dated July 1, 1952, received in DMEA August 25, recommends an exploration project in 3 phases, at a total cost of $51,380. The field team estimates that the work proposed might prove 2,100 tons of ore of unknown grade, possibly 1.35 percent WO_3. This tonnage would be too small to warrant erection of a mill. Ore of this grade delivered to a custom mill at Pioche or Bishop, could probably be sold for $38 per contained unit of WO_3 or $51 per ton of ore. The gross value would be $107,000, only a little more than twice the estimated cost of exploration.

The amount and cost of the proposed work are excessive considering the size of the anticipated orebodies. The only hope for a profitable operation and a significant production lies in the possibility of larger orebodies. The field report, however, gives no geologic information upon which to base hopes for larger orebodies. Any possibility for larger ore shoots probably depends on changes in lithology and structure of the limey wall rocks of the veins. Such changes might be predicted from careful mapping of surface geology, although surface outcrops may be insufficient. No surface map is contained in the field report.

The field report accepts the applicant's proposal in toto despite the fact that past work on the property, under the same management, was not efficiently planned. It is reasonable to suspect that geologic and engineering advice and criticism is badly needed.

Copy retained 400

From the maps, it appears fair to criticize past operations on the basis of location and inclination of shaft, of spacing of levels, of wasteful crosscuts, and of poor stoping methods.

Considerable importance is placed upon the "Black Horse fault", which is exposed only at the west face of the 120 level. The maps give no evidence that this fault is of greater magnitude than others exposed in the mine. The proposal to sink to the 200 level and then crosscut 150 feet to determine the offset on the "Black Horse fault" seems extravagant and needless. There is a fair chance that the offset could be determined readily on the 120 foot level by driving one round west, then probing the walls with holes drilled with long steel.

I suspect that the best exploration program on the property would consist of careful geologic mapping of the surface, possibly including some trenches, followed by diamond drilling from the surface. However, it appears to be the applicant's desire to sink and drift, a procedure that has some justification because of numerous small faults that may be so unpredictable that core drilling would miss the vein.

I suggest that the applicant and Field Team be asked to consider the following program in lieu of the proposals made.

1) On the 120-level, drift 5 feet west, then test the walls of the drift with long steel in search of the vein. If this level is in poor condition and the work is overly expensive, this work should be eliminated in favor of similar drilling from the new level below.

2) Sink the inclined shaft to a point 118 feet on the incline below the 120 level (a vertical interval of 100 feet). It is not clear just how deep the shaft now is; as shown on figure 3 (longitudinal projection), the shaft is now 30 feet below the 120 level and should be sunk 88 feet more.

3) Drift and crosscut 300 feet on this new level. The first work shall involve finding the vein and driving 200 feet east from the shaft on the vein.

The revised total work and costs (using applicant's estimates of unit costs) are summarized as follows:

Shaft sinking 88 feet at $125 per foot	$ 11,000
Add station and ore pocket if necessary	490
Drift and crosscut 300 feet at $37/foot	11,100
	$ 22,590

The field team explains that the excessive cost of shaft work is caused by a small skip and inadequate hoisting facilities. The hoist engine is a Gardner-Denver HKL 9-horsepower air tugger, and the skip is of ½-ton capacity. Possibly substitution of more suitable equipment would result in lower over-all costs.

D. M. Lemmon

D. M. Lemmon

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

AUG 25 1952

Office of
Executive Officer
DMEA Field Team
Region III

1012 Flood Building
870 Market Street
San Francisco 2, Calif.

August 18, 1952

oc 9/1

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 2289 (Tungsten), Black Horse Tungsten Deposit, Graham Development Corp., White Pine County, Nevada

Reference is made to "Review of Application for Exploration Assistance," dated March 31, 1952.

Attached are the original and three copies of a report - DMEA 2289, Black Horse Tungsten Deposit, Graham Development Corp., White Pine County, Nevada by Roscoe M. Smith, Geologist, U. S. Geological Survey and Russell R. Trengove, Mining Engineer, U. S. Bureau of Mines, dated July 1, 1952.

Mr. A. C. Johnson, Chief, Mining Division, Bureau of Mines, Region III, Reno, Nevada, reports that the summary of costs prepared by Mr. R. E. Margenau, Vice President, Graham Development Corporation, includes 150 feet of crosscutting under Phase III, which should be reduced to 75 feet, as that is what was allowed under the recommendations of the examining engineer and geologist.

As for Mr. Margenau's costs, Mr. Johnson writes that he discussed them with Mr. Trengove and that in his opinion the labor costs for drifting and crosscutting are reasonable. He believes, however, that the cost for shaft sinking is excessive, but Mr. Trengove explained that there is a bottle neck in the Company's hoisting operations. They have a small skip with inadequate hoisting facilities. The property is in a remote location and it will be difficult to keep miners, which will also add to the cost of an exploration project in the area in which the Company operates.

Mr. Johnson recommends that the application be given favorable consideration although the exploratory costs seem high. Region III Field Team concurs in Mr. Johnson's recommendation.

The docket is being returned herewith.

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

Attachments
Copy to E. H. Bailey, USGS

ON-SITE
R PT.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 25 1952

UNITED STATES
DEPARTMENT OF THE INTERIOR
OSCAR L. CHAPMAN, SECRETARY

DEFENSE MINERALS ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

DMEA-2289, Black Horse Tungsten Deposit
Graham Development Corp.
White Pine County, Nev.

Roscoe M. Smith, Geologist
U. S. Geological Survey

Russell R. Trengove, Mining Engineer
U. S. Bureau of Mines

July 1, 1952

Reviewed by
DMEA OPERATING COMMITTEE

9-29-52
(date)

DOCKET DMEA-2289

Graham Development Corp.

Black Horse Tungsten Deposit
White Pine County, Nev.

SUMMARY, CONCLUSIONS, and RECOMMENDATIONS

The U. S. Geological Survey and the U. S. Bureau of Mines examined the Black Horse tungsten mine, situated about 54 miles southeast of Ely, Nev.

The purpose of the examination was to determine if the geological conditions favored the possibility of the continuation of the ore body at depth. An application for a Government exploration loan, amounting to $56,200, was made December 14, 1951. An amendment was requested by the Graham Development Corporation on May 9, 1952 in which the estimated cost of the entire project has been reduced to $51,380.

The ore mineral is scheelite, which is essentially free of molybdenum. Ore was mined to a depth of 100 feet. Total production is reported to be 630.5 tons of ore estimated to contain 1,410 units, of which 35 percent or 403 units were recovered. The average grade was about 2.2 percent WO_3.

The total estimated reserves are 1,600 units having a gross value of about $101,000 at the current price ($63 per unit). The applicant's program is logical and the chances that it will reveal a few thousand tons of low grade ore are good. Although the reserves are inadequate to repay the loan a limited amount of exploratory work appears to be justified. It is recommended, therefore, that the application be approved and that each phase of the program be contingent upon the success of the preceding phase.

INTRODUCTION

An application for a Government loan under sec. 302 of the Defense Production Act of 1950, was made by Charles R. Graham, President, Graham Development Corporation, Ten Hundred Lincoln Road, Miami Beach 39, Florida. The loan is intended to be used in exploration by sinking a shaft, drifting and crosscutting.

An examination was made of the Black Horse tungsten mine by geologists[1/] of the U. S. Geological Survey and engineers[2/] of the Bureau of Mines in April 1952. Representatives of the Graham Development Corporation who accompanied the examiners are as follows:

Brigham E. Rees, Resident Mining Engineer,
718 Canyon Street, Ely, Nevada.

Roy E. Margenau, Vice-President, Mining Div.,
646 University Place, Grosse Point 30, Mich.

Joseph B. Graham, Director,
606 E. Vantrees Street, Washington, Ind.

The property consisting of two unpatented mining claims, Gold King Nos. 1 and 2, are owned by Wayne D. Gonder and Clarice Peterson, ranchers in the Ely, Nevada vicinity. The Graham Development Corporation has a lease and option to purchase dated September 1, 1949. This lease and option to purchase agreement was amended March 13, 1952 when the owners signed the Landlord's Subordination Agreement and the lease and option to purchase was extended from September 1, 1951 to September 1, 1955.

The Black Horse tungsten mine is situated near the southeastern corner of White Pine County, several miles north of the well known

1/ Roscoe M. Smith and John Powers.
2/ Russell R. Trengove and Leopold F. Muller.

Wheeler Peak Mountain (fig. 1). It is located in sec. 24, T. 15 N., R. 68 E., 54 miles southeast of Ely, Nev., via U. S. Highway No. 6.

It may be reached by following hard-surfaced U.S.Highway No. 6 southeast from Ely a distance of about 51 miles, then turning left on a dirt road to the mine about 3 miles distant. This dirt road is passable during the rainy season.

The altitude at the mine shaft is about 7,000 feet. Buildings consists of two small shacks, one housing the compressor and the other the small hoist. There is no mine timber or transmitted electric power on the property. The only water available is that obtained underground - about 25 gals. per minute.

The company owns a camp, the Goody Ranch, along U.S.Highway No. 6 about 17 miles west of the mine. This camp has housing facilities, water, electricity and a relic of a tungsten mill.

EQUIPMENT

Equipment at the Black Horse mine is as follows:

1 Gardner-Denver, WBG, 315 cu. ft. compressor, powered by D-11000 Cat.
1 Gardner-Denver, HKL, 9-horsepower air tugger used for mine hoist engine.
1 Headframe, 1 compressor shack and 1 hoist shack
130 linear feet 16-pound track in shaft
1 ½-ton skip
1 3-ton Fairbanks-Morse duplex pump
1 1½-ton Mack dump truck
2 Mine cars
4 Jackhammers
1 Drifter drill
2 Stopers
Various underground and shop tools

HISTORY AND PRODUCTION

Mining operations were started in 1942. A small inclined shaft was sunk to a depth of about 50 feet. Some drifting and crosscutting

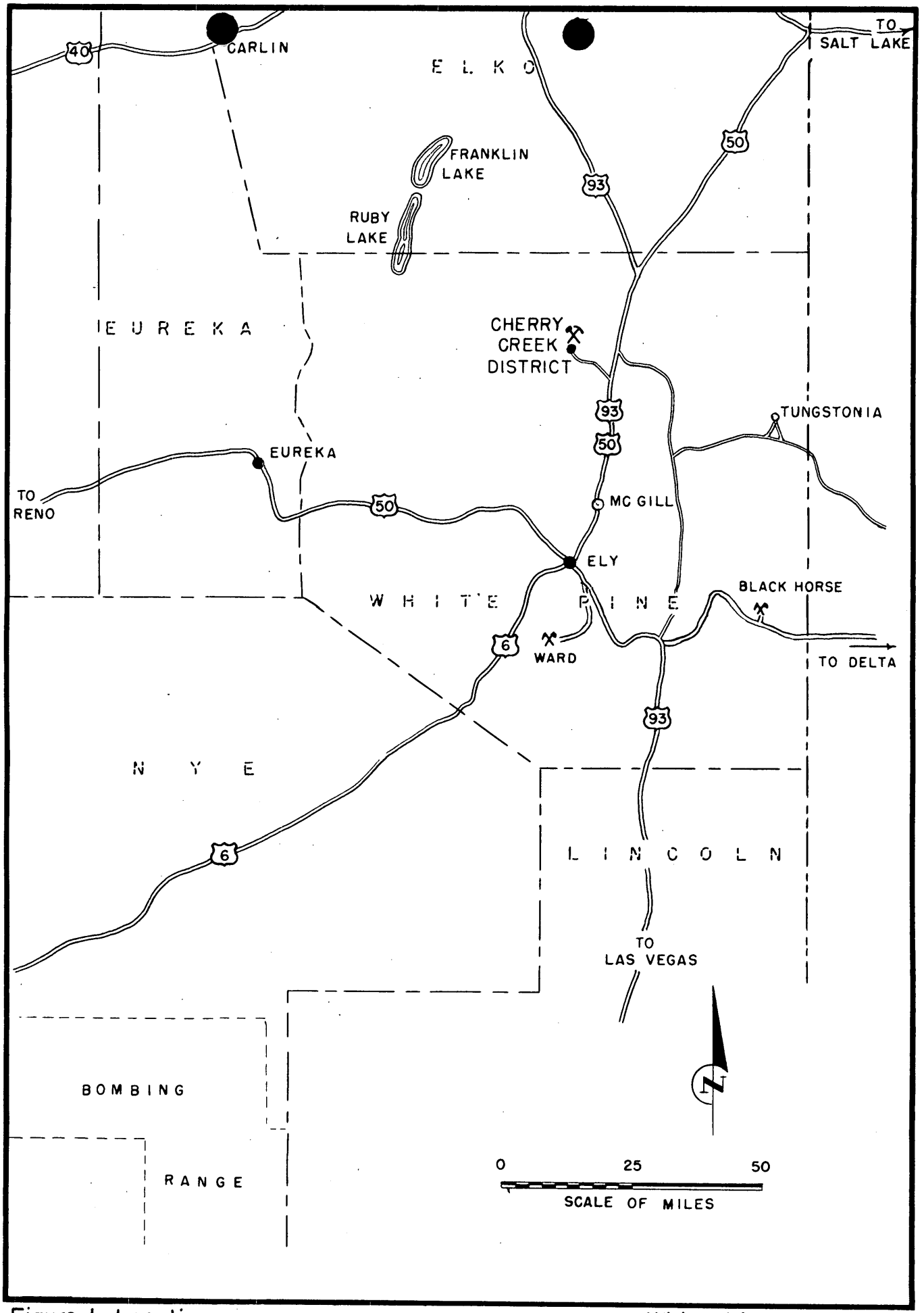

Figure 1- Location map, White Pine Co., Nevada

was done by the Gilded Age Mining Company. This showed the presence of scheelite but in the upper levels, the ore zone was narrow, about one foot in thickness, which necessitated mining considerable waste rock.

It was decided to continue sinking the shaft to a depth of 100 feet in 1943. At this level the ore was wider and of higher grade scheelite. The company mined and milled 630 tons of ore from which they obtained 403 units of WO_3. This concentrate analyzing better than 60% WO_3 was recovered in a small gravity mill which was not adapted to recovering the fines. Pipe samples of the tailings are said to have analyzed 0.75% WO_3 which added to the 0.60% WO_3 recovered would make the heads analyze 1.35% WO_3. No head samples were taken during the mining and milling operation.

The Gilded Age Mining Company held a Metal Reserve contract for the production of tungsten. This was cancelled in 1944 and mining ceased because of the drop in the price of tungsten.

The Graham Development Corporation reopened the mine in October 1951 and operated intermittently during the past severe winter. Shaft sinking was resumed and the advance to the latter part of April 1952 was about 20 feet.

DEVELOPMENT

The corporation has spent $14,800 on the property through November 30, 1951. The extent of the present workings is as follows:

150 linear feet of inclined shaft -60°
111 linear feet of raises

Both overhand and underhand stoping methods have been used. It is reported that the reason stoping ceased when they were still in ore

was on account of the excess amount of fines in the ore which were lost during milling operations. These fines could have been recovered if the mill had some flotation units.

SAMPLING

Most of the high grade ore has been mined. Eight samples were taken of the remnants. Their locations, widths and analyses are shown on figure 5.

GEOLOGY

The area is underlain by sedimentary rocks of probable Cambrian age which have been highly folded and complexly faulted. In the mine area interbedded limestone, shale, and carbonaceous shale strike east and dip steeply north or are overturned. The rocks are cut by many faults; most prominent is an east striking set that nearly parallels the bedding, and one other fault, the post mineral (?) Black Horse fault, which strikes N. 25° E. and dips 60° SE.

ORE DEPOSITS

Tungsten ore occurs in small shoots and lenses in quartz-calcite veins 1 to 3 feet wide in thin-bedded carbonaceous limy shale. At least three veins occur on the property; a gold-bearing vein with a small showing of scheelite reported to be at the bottom of a 100-foot shaft, the Black Horse tungsten vein, and an unnamed vein on the 50-foot level of the Black mine 50 feet south of the main vein (fig. 2). Only the Black Horse tungsten vein has yielded ore in commercial quantities.

The Black Horse vein is in a fault zone which strikes east and dips steeply south. It is locally 9 feet wide but averages about

SAMPLE NO.	WIDTH FT.	WO_3 %
BM 1	1.5	0.77
BM 2	7.4	0.35
BM 3	2.3	1.35
BM 4	1.0	1.31
BM 5	1.8	1.32
BM 6	1.2	1.62
BM 7	1.3	2.22
BM 8	1.2	0.88
	2.21	.93%

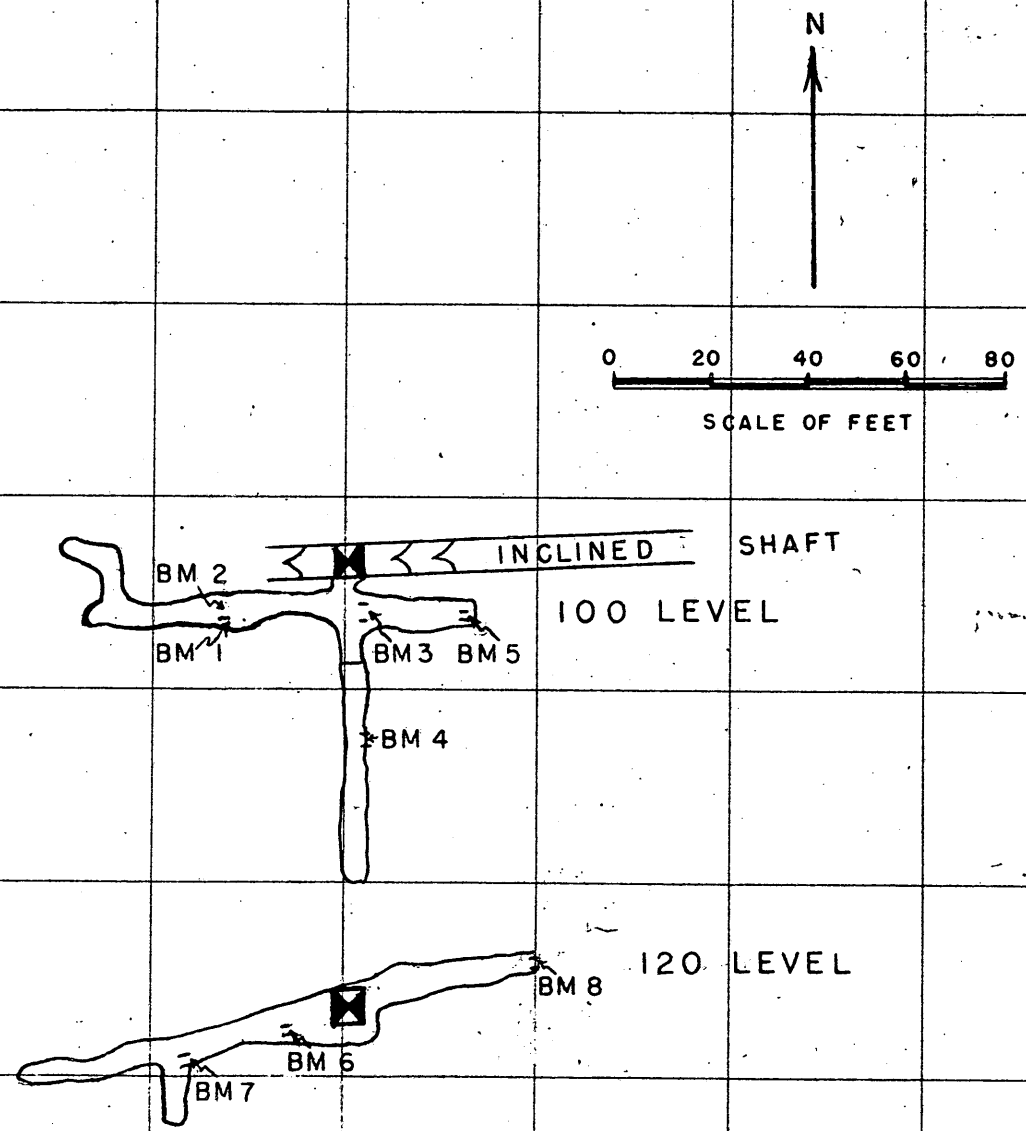

FIGURE 5 SAMPLE MAP—BLACK HORSE TUNGSTEN MINE, WHITE PINE CO., NEVADA.

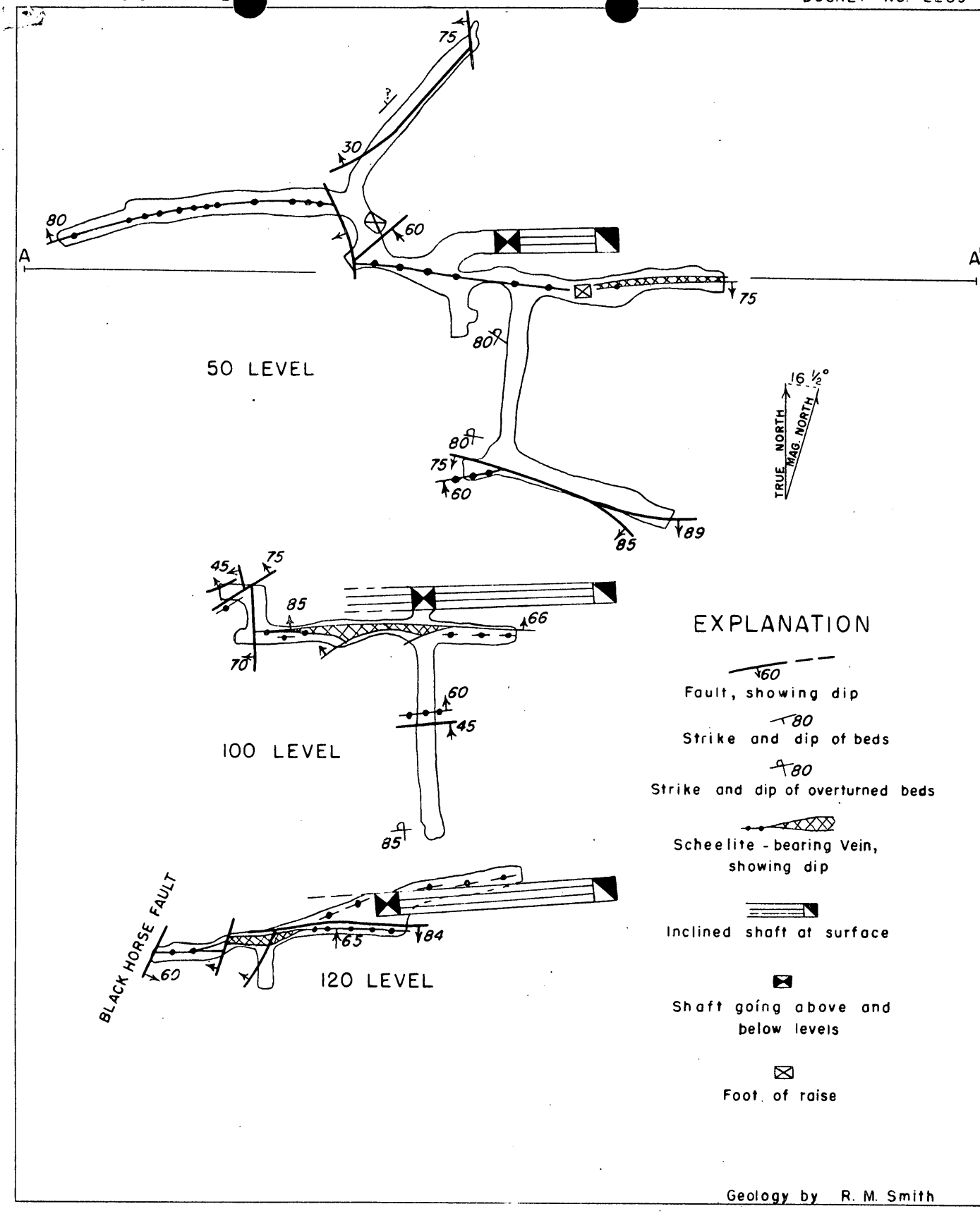

FIG. 2 GEOLOGIC LEVEL MAPS OF THE BLACK HORSE MINE

WHITE PINE COUNTY, NEVADA

0 40 80 FEET

Scale

2 feet in width. It contains lenticular masses of quartz which average about a foot in width.

The ore mineral is scheelite, which is essentially free of molybdenum, and it occurs as disseminated specks and as concentrations of as much as 2.5 percent WO_3 in the quartz. Ore was mined to a depth of 100 feet. Only the highest grade parts of the vein were mined, and total production is reported to be 630.5 tons of ore estimated to contain 1,410 units, of which 35 percent or 403 units were recovered. The average grade was about 2.2 percent WO_3.

Exploration on the 120 foot level, 20 feet below the 100 level stopes, disclosed little or no high grade ore. Grade on the 120 level may average 0.50 percent WO_3. Samples cut by Bureau of Mines engineers on the 120 level on the best ore average 1.57 percent WO_3 across a width of 1.2 feet.

On the 120 level the vein is cut off by the Black Horse fault; the faulted continuation of the vein is not exposed either at the surface or underground, and the amount of displacement along the fault is not known.

ORE RESERVES

There are a few tons of measured ore averaging 0.5 percent WO_3 in the blocks above the existing levels. A total of 1,700 tons of indicated ore averaging 0.5 percent WO_3 is estimated to be in the block above the 120 level (fig. 3). If the vein is persistent to the east of the workings, about 1,200 tons may be inferred to be in the triangular block 170 feet long, 160 feet high, and 1.0 feet thick, above the proposed 200 foot level. An additional 900 tons of ore

averaging 0.5 percent WO_3 may be inferred to be above the proposed 300 foot level above the Black Horse fault. The block is 130 feet long, 85 feet high, and 1.0 feet thick. Total reserves are 3,800 tons containing 1,900 units of WO_3. Of this total, perhaps 85 percent can be mined, and 15 percent left in pillars. On this basis, the effective reserve is 3,200 tons containing 1,600 units. No ore reserve estimate is made for the block under the Black Horse fault.

PROPOSED EXPLORATION

The applicant has proposed (letter of May 9, 1952 to H. C. Miller) to explore the Black Horse vein to a depth of 300 feet by exploratory work in three phases:

1. Sink the Black Horse incline shaft 72 feet and cut a station at the 200 foot level. Drift 200 feet east along the vein.

2. Crosscut north and south from the 200 level station in the hanging wall (west) of the Black Horse fault (fig. 3) to locate the faulted continuation of the Black Horse vein. A total of 150 feet of crosscut is proposed for this work.

3. In the event that Phase 2 reveals a vein on the west side of the fault, and also a significant quantity of ore on either side of the fault, sink the Black Horse shaft 100 feet, cut a station at the 300 foot level and drift along the vein on both sides of the Black Horse fault. A total of 200 feet of drift is allowed for this work. An additional 75 feet should be provided for crosscutting.

CONCLUSIONS AND RECOMMENDATIONS

The geologist of the U. S. Geological Survey and the engineer of the U. S. Bureau of Mines are in accord with the following conclusions

and recommendations:

The total estimated reserves are 1,600 units having a gross value of about $101,000 at the current price ($63.00 per unit). The applicant's program is logical and the chances that it will reveal a few thousand tons of low grade ore are good. Although the reserves are inadequate to repay the loan, a limited amount of exploratory work appears to be justified. It is recommended, therefore, that the application be approved and that each phase of the program be contingent upon the success of the preceding phase.

DEPARTMENT OF INTERIOR
BUREAU OF MINES
REGION III
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JUL 7 AM 8:53

SAN FRANCISCO, CALIFORNIA

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39 FLORIDA

TELEPHONE 5-0921

Sheet 5, page 2, Form MF-103
Additional Information 7/29/52

Reference: Docket DMEA 2289
Additional Information requested by letter, A. C. Johnson, dated 7/15/52.

Breakdown of overhead charges included in cost estimates for Docket DMEA 2289.

Total overhead assigned to project:

Engineering	$ 2,700	
Accounting	2,500	
Equipment	6,000	(see note)
Total	11,200	

To obtain an overhead rate per foot, we allowed for three times as much overhead for shaft work as for drifting and crosscutting, and we allowed for a flat $ 90 for each station, as follows:

172 feet of shaft @ $ 27. per foot	$ 4,644
400 feet of drift @ 9. per foot	3,600
300 feet of crosscut @ 9. per foot	2,700
2 stations @ $ 90. each	180
Total	$ 11,124.

Note: In the origonal application, we allowed $ 4000. for equipment rental, $ 2700. for new equipment to be purchased, $ 1000. for equipment to be rented, and $ 1250 for repairs, a total of $ 8,950.
As ammended, we propose to consolidate all of these estimates into one amount of $ 6,000 for equipment rental, repairs, depreciation and new equipment to be rented or purchased.

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39 FLORIDA
TELEPHONE 5-0921

Sheet 6R-Phase I, page 2
Additional Information 7/29/52

Reference: Docket DMEA 2289, Form MF-103
Additional information requested by letter, A. C. Johnson dated 7/15/52

Phase I

a. Breakdown of labor and material cost to sink shaft 72 feet to the 200 ft level.

Labor per shift per month

2 Miners @ $ 375/Mo.	$ 750
1 Hoistman @ 350/mo	350
1 Working foreman	450
	1,550
O.A.B., W.C., & Unempl. Comp.	165
Labor per shift/Mo.	1,715.

It is estimated that a shift can advance the shaft by 26 feet per month.

Labor cost per foot $\frac{1715}{26}$ $ 66 per foot

Breakdown of material cost per foot to sink shaft 72 ft to the 200 ft level.

Powder caps and fuse	$ 4.35
Timber	2.32 ?
Fuel and oils	17.28
* Other supplies	8.05
Total per foot	32.00

* Other supplies include steel bits, nails, spikes, shovels, picks, batteries, coal, carbide, pipe fittings and other miscellaneous supplies.

Overhead per foot of shaft to sink shaft 72 feet $ 27./ft
See Sheet 5 page 2, form MF - 103

Total cost to sink shaft 72 ft:

Labor @ $ 66. per foot	$ 4752
Material @ $ 32/ft	2304
Overhead @ $ 27/ft	1944
	$ 9000.

b. Lump sum cost for cutting station at 200' level $ 490.

See Page 3

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39 FLORIDA

TELEPHONE 5-0921

Reference: Docket DMEA 2289

c. Breakdown of costs to drift 200 feet at the 200 ft level

Labor: Labor per month $ 1,715. from page 2
It is estimated that drift can be advanced by 90 feet per month per shift, therefore:

3½ day by board?

Labor per foot of drift $\frac{1715}{90}$ or $ 19 per foot

Materials required per foot to drift 200 ft at the 200 ft level:

Powder, caps and fuse	$ 3.28
Fuel and oil (Power)	4.32 ?
Miscellaneous supplies	1.40
Total Material per foot	$ 9.00

Overhead per foot of drift - $ 9.00
See Sheet 5 page 2 Form MF 103

Total cost 200 feet of drift:

Labor @	$ 19 per foot	$ 3800
Material	9 per foot	1800
Overhead	9 per foot	1800
Total	37 per foot	7400

Summary of total cost of Phase I

Sink Shaft 72 Feet @ $ 125./ft	9,000.
Cut Station	490.
Drift 200 feet	7,400.
Total Phase I	16,890.

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39 FLORIDA

TELEPHONE 5-0921

Sheet 7 R Phase II, page 2
Additional Information 7/29/52

Reference: Docket DMEA 2289
Additional Information requested by letter, A. C. Johnson, dated 7/15/52.

Phase II

It is estimated that the cost of material, labor and overhead for crosscutting at the 200 foot level will be the same as for drifting at the 200 foot level on a per foot basis. For breakdown of cost per foot, please see previous sheet 6 R Phase I, page 3.

Cost per foot	$ 37.
Total cost 150 ft.	$ 5,550.

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39 FLORIDA

TELEPHONE 5-0921

Sheet 8 R - Phase III, page 2
Additional Information 7/29/52

Reference Docket DMEA 2289, Form MF-103
Additional Information requested by letter, A. C. Johnson, dated 7/15/52

Phase III

Breakdown of labor materials and overhead required to complete Phase III.

a. Sink shaft 100 feet to the 300 ft level
Labor: Labor per month from Sheet 6R Phase I page 2, $ 1715.
It is estimated that shaft can be advanced 19½ feet per shift per month.
Labor cost per foot of shaft $\frac{1715}{19.5}$ or $ 88 per foot

Material cost per foot of shaft:

Powder, caps and fuse	4.35
Timber	2.32
Fuel and oils	27.28 ✓ mfs
Supplies	8.05
Total materials per foot	42.00

Overhead per foot of shaft	$ 27.00
See Sheet 5, page 2, Form MF 103	
Total cost per foot of shaft	$ 157.

b. Cut station at 300 foot level. Lump sum cost $ 290

c. It is estimated the cost to drift 200 feet at the ~~20~~ 300 foot level will be the same as at the 200 ft level. for breakdown of cost see Sheet 6 R-Phase I, page 3.
Cost per foot $ 37. Total cost 200 ft $ 7,400.

d. It is estimated the cost to crosscut 150 feet at the 300 foot level will be the same as at the 200 foot level. For cost breakdown per foot see Sheet 7 R-Phase II, page 2.
Cost per foot $ 37 Total cost 150 ft $ 5,550.

Summary cost of Phase III

Sink Shaft 100 feet	$ 15,700
Cut Station	290
Drift 200 feet	7,400
Crosscut 150 feet ✓	5,550
Total cost Phase III	28,940

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SAN FRANCISCO CALIF 8-5-52 110P

C. O. MITTENDORF, ACTG ADMNTR

DEFENSE MINERALS EXPLORATION ADMINISTRATION INTERIOR BLDG WA

REURTT AUGUST 1, DOCKET DMEA 2289, GRAHAM DEVELOPMENT. PROPERTY WAS EXAMINED AND REPORT PREPARED DATED JULY 1. REPORT RETURNED TO RENO JULY 14 WITH REQUEST THAT EXAMINING ENGINEER GIVE FURTHER BREAKDOWN OF COSTS NEEDED BY YOU. WILL ATTEMPT TO SPEED UP DELIVERY OF THE REPORT TO YOU.

H. C. MILLER, EXEC OFCR DMEA FLD TEAM REGION III

1 DMEA 2289 1 14

HK 114P

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 6 1952

AUG 6 10 30 AM '52
BUREAU OF MINES
MAIL ROOM
WASHINGTON, D. C.

FILE COPY
SURNAME:

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

Defense Minerals Exploration Adm.
G. C. Selfridge
5284
Selfridge

14X3953, Working Fund, DMEA
August 1, 1952

Mr. E. G. Miller, 1112 Flood Building, 870 Market St., San Francisco 2, Calif.

Docket No. DMEA 2284 - Graham Development Corporation

Your June monthly report states field examination report completed.

Not received as yet. Can it have been lost in mail.

C. O. Mittendorf (for) G.H. 8-1-52

G. O. Mittendorf
Acting Administrator
Defense Minerals Exploration
Administration

GCSelfridge'lm
8/1/52

cc: Admn. Reading File
Docket
R. W. Geehan, USBM
D. M. Lemmon, USGS
Field Team Reg. III
Audits
G. C. Selfridge

400 FILE COPY
SURNAME:

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

Selfridge.

Mr. Charles R. Graham, President
Graham Development Corporation
1000 Lincoln Road
Miami Beach 39, Florida

Re: Docket No. DMEA 2289 - Tungsten
Gold King Mine
White Pine County, Nevada

Dear Mr. Graham:

This is to acknowledge receipt of your letter of July 14, 1952, in which you make inquiry regarding the status of the subject docket.

From recent information, we are expecting the field examination report in the very near future. We regret that its delivery has been delayed but wish to assure you that as soon as it is received we shall act promptly upon your application and notify you of our decision.

Sincerely yours,

7/18

(signed) FRANK E. JOHNSON (fw)

Acting Administrator
Defense Minerals Exploration
Administration

GCSelfridge:ls 7/16/52

cc: Docket
Admn. Read. File
G. C. Selfridge
Field Team, Region 3
D. M. Lemmon, USGS
R. W. Geehan, USBM

SD

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39 FLORIDA

TELEPHONE 5-0921

July 14, 1952

Iron & Ferro-Alloys Division
Defense Minerals Exploration Administration
Department of the Interior
Washington 25, D. C.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 14 1952

Reference: DMEA-2289

Dear Sirs:

Would you please tell us the current status of our loan application Docket DMEA-2289.

2½ mos.

The application was filed December 11, 1951, and the field examination was made April 28 and 29, 1952. The delay in getting a decision on the loan has been very costly to us especially since the field examination. Furthermore, if we cant get started soon, the project will go into the winter months when it is sometimes impossible to operate.

We hope you can understand our situation, and give us an answer soon.

Sincerely yours

GRAHAM DEVELOPMENT CORPORATION

Charles R. Graham

Charles R. Graham, President

(To be fwd to DC in few days per July mo. rep. of Reg. 3.)

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39 FLORIDA

TELEPHONE 5-0921

Sheet # 1 (ammended)
May 6, 1952

Reference: Docket No. DMEA 2289

1. (b). Copy of ammended lease and option on subject claims is attached.

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39 FLORIDA

TELEPHONE 5-0921

Sheet 3 (ammended) Phase I
May 6, 1952

Reference: Docket No. DMEA-2289

Supplement to Form MF 103. Sheet 3 ammended

Phase I of three phases

3. (a). Sink shaft 52 feet to the 200 foot level and continue 20 feet additional to provide sump for loading and water, a total of 72 feet.
A station is to be cut at the 200 ft. level.
A total of 200 feet of drifting is to be done along the vein.
Cost of Phase I is estimated at $ 16,890.

(b) The work would be started immediately.

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39 FLORIDA

TELEPHONE 5-0921

Sheet 3 (ammended) Phase II
May 6, 1952

Reference: Docket No. DMEA -2289

Supplement to Form MF 103. Sheet 3 ammended

Phase II of three phases

3. (a) Crosscut 150 feet to explore and locate vein offset in hanging wall, Black Horse shaft, along the fault cutting shaft around the 200 foot level.
Cost of Phase II is estimated at $ 5,550

(b) The work would be started as soon as Phase I is completed.

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39 FLORIDA

TELEPHONE 5-0921

Sheet 3 (ammended) Phase III
May 6, 1952

Reference: Docket No. DMEA-2289
Supplement to Form MF 103. Sheet 3 ammended

Phase III of three phases

3. (a) Sink shaft from the 200 foot level to the 300 foot level and cut a 20 foot sump. Total additional shaft to be cut is 100 feet.
Cut station at the 300 foot level
Drift 200 feet along the vein
Crosscut on the footwall and hanging wall side of the vein to explore faults and for other fractures.

(b) The work would be started on completion of Phase II of this project. The cost of Phase III is estimated at $ 28,940.

Remark: Summary of cost estimate for the entire project.

Phase I	$ 16,890
Phase II	5,550
Phase III	28,940
	51,380

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39 FLORIDA

TELEPHONE 5-0921

Sheet 6 R, Phase I
Ammended May 6, 1952

Reference: Docket No. 2289 DMEA

Supplement to Form MF 103. Sheets 6 R, 7 R, and 8 R, replace sheets 6, 7, 8, and 9 of origonal application

Estimated cost of Phase I

Operation	Footage	Labor	Material	Overhead	Total cost/ft	Total cost
Sink Shaft	72	$ 66/ft	$ 32/ft	$ 27/ft	$ 125/ft	$ 9,000.
Cut Station	-	350	50	90		490.
Drifting	200	19/ft	9/ft	9/ft	37/ft	7,400.
			Total cost Phase I			$ 16,890

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39 FLORIDA

TELEPHONE 5-0921

Sheet 7 R, Phase II
Ammended May 6, 1952

Reference: Docket No. DMEA 2289

Supplement to Form MF 103. Sheets 6 R, 7 R and 8R, replace sheets 6, 7, 8, and 9 of origonal application.

Estimated cost of Phase II

Operation	Footage	Labor	Material	Overhead	Total cost/ft	Total cost
Crosscutting	150	$ 19/ft	$ 9/ft	$ 9/ft	$ 37/ft	$ 5,550
	Estimated total cost of Phase II					$ 5,550

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39 FLORIDA

TELEPHONE 5-0921

Sheet 8 R, Phase III
Ammended May 6, 1952

Reference: Docket No. DMEA 2289

Supplement to Form MF 103. Sheets 6 R, 7 R, and 8 R, replace sheets 6, 7, 8 and 9 of the origonal application.

Estimated cost of Phase III

Operation	Footage	Labor	Material	Overhead	Total cost/ft	Total cost
Sink shaft	100	$ 88/ft	$ 42/ft	$ 27/ft	$ 157/ft	$ 15,700
Cut Station		150	50	90		290
Drifting	200	19/ft	9/ft	9/ft	37/ft	7,400
Crosscutting	150	19/ft	9/ft	9/ft	37/ft	5,550
		Total estimated cost Phase III				$ 28,940

Remarks:

Shaft costs are higher than average because of water seepage and also due to limestone breaking fine and setting under water making mucking difficult. We are required to meet or exceed miners wages of the large mines to obtain satisfactory labor because of distance from living accomodations at Ely.

Costs include rental of present equipment and also rental cost of new equipment that may be purchased. The total cost of any new equipment is not included in the estimates and will not be charged to the project.

We plan to make use of the Baltimore Camas Tungsten Mill near Ely, Nevada, for recovery of Tungsten from ores on above operation.

We are not willing to make committment to do the work of Phase III unless the DMEA will authorize the entire project at this time, because cost estimates are based on operation of two shifts which would probably not be practical if only one phase is authorized at one time.

AMENDMENT TO AGREEMENT DATED SEPTEMBER 1, 1949, BETWEEN CLARICE PETERSON AND WAYNE GONDER AS PARTY OF THE FIRST PART AND THE GRAHAM DEVELOPMENT CORPORATION PARTY OF THE SECOND PART.

For and in consideration of the sum of $1.00 (one dollar) and other valuable considerations, receipt of which is hereby acknowledged, we CLARICE PETERSON AND WAYNE GONDER do hereby agree as follows:

1. To cancel amendment dated to LEASE AND OPTION TO PURCHASE AGREEMENT FOR GOLD KING MINING CLAIMS #1 AND #2 dated September 1, 1949, between CLARICE PETERSON AND WAYNE GONDER Party of the First Part and GRAHAM DEVELOPMENT CORPORATION, Party of the Second Part.

2. To amend the LEASE AND OPTION TO PURCHASE AGREEMENT for GOLD KING MINING CLAIMS #1 AND #2 dated September 1, 1949, between CLARICE PETERSON AND WAYNE GONDER, Party of the First Part and GRAHAM DEVELOPMENT CORPORATION, Party of the Second Part as follows:

   (a) The LEASE AND OPTION TO PURCHASE AGREEMENT price of the said mining claims (GOLD KING #1 AND GOLD KING #2) is to be increased from $4,500 (four thousand five hundred dollars) to $10,000 (ten thousand dollars). It is however understood that the initial payment in connection with this agreement together with all royalties or rentals paid since this agreement and its amendments were in effect are to be applied against the purchase price of $10,000.

   (b) That the LEASE AND OPTION TO PURCHASE AGREEMENT is to be extended from September 1, 1951, to September 1, 1955.

   (c) All other conditions to remain the same.

In further consideration of the above amendment to the original LEASE AND OPTION TO PURCHASE AGREEMENT dated September 1, 1949, ~~between~~ CLARICE PETERSON AND WAYNE GONDER Party of the First Part, do hereby agree to sign the LANDLORD'S SUBORDINATION AGREEMENT (Form 1202) on GOLD KING MINING CLAIMS #1 AND #2 as required by the UNITED STATES DEPARTMENT OF INTERIOR. Defense Mineral Administration for Docket DMA 2289 Tungsten - Black Horse Mine.

In consideration of this amended agreement the GRAHAM DEVELOPMENT CORPORATION Party of the Second Part do hereby agree to do and conform to the requirements of the extended LEASE AND OPTION TO PURCHASE for the extended period in the same manner as is required in the original LEASE AND OPTION TO PURCHASE AGREEMENT.

Witness Genevieve Richardson Signed Clarice Peterson
Clarice Peterson

Witness Genevieve Richardson Signed Wayne Gonder
Wayne Gonder

Dated March 13-1952 Graham Development Corp.

By R. Margeson
VICE-PRESIDENT

Witness James F Stollenberg

Dated March 8-1952

400

FILE COPY
SURNAME:

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

Brewer
Selfridge
Thayer
Gilman

MAR 3 1 1952

Mr. Charles R. Graham
Graham Development Corporation
1000 Lincoln Road
Miami 39, Florida

Re: Docket No. DMEA 2289X - Tungsten
Gold King No. 1 & No. 2 Claims
Black Horse Vein
Black Horse Mining District
White Pine County, Nevada

Dear Mr. Graham:

Your application for assistance in exploring the above noted property has been reviewed by the Iron and Ferro-Alloy Division of the Defense Minerals Exploration Administration and has been referred to Mr. H. C. Miller, Executive Officer, DMEA Field Team, Region III, 1012 Flood Building, 870 Market Street, San Francisco 2, California, for a field examination.

The Regional Office will contact you at an early date in regard to the examination of your property. Any assistance that you can give the members of the field team in the examination will be appreciated.

Sincerely yours,

C. O. Mittendorf (for) J.N. 3-31-52

Acting Administrator
Defense Minerals Exploration
Administration

QLBrewer'lm
3/27/52

cc: Admn. Reading File
Docket
R. W. Geehan, USBM
D. M. Lemmon, USGS
Field Team Reg. III
G. C. Selfridge
Q. L. Brewer
Operating Committee

F.T. report sent, Graham & report sent

Field Team Reg. III

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

MAR 31 1952

Selfridge
Brewer

Mr. H. C. Miller
Executive Officer, Region III
1012 Flood Building
870 Market Street
San Francisco 2, California

Dear Sir:

We attach "Review of Application for Exploration Assistance" on:

Applicant Graham Development Corporation

Docket No. DMEA 2289

Commodity Tungsten

Amount $ 56,200.00

Please expedite consideration of the application with particular reference to the points raised in the attached "Review".

Sincerely yours,

Frank E. Johnson

Chairman, Operating Committee
Defense Minerals Exploration
Administration

APPROVED:

A. N. Hedges
Member, Bureau of Mines

T. P. Thayer
Member, Geological Survey

13759

3/27/52

DEPARTMENT OF INTERIOR
BUREAU OF MINES
REGION III
RECEIVED

1972 APR 1 PM 2:33

SAN FRANCISCO, CALIFORNIA

Defense Minerals Administration

Review of Application for Exploration Assistance

Docket No. DMEA 2289

Commodity Tungsten

Total Amount $56,200.00

Govt. Participation $42,150.00

1. Name and Address of Applicant Graham Development Corporation
1000 Lincoln Road
Miami Beach 39, Florida

2. Location of Property Black Horse Mine - Black Horse Mining District
T 15 N; R 68E; Section 24, White Pine County, Nevada - 54 miles Southeast
of Ely, Nevada via U. S. Highway No. 6

3. Mineral or metal Tungsten Is it listed in Section 9 of MO-5? Yes

If not, application will be rejected.

4. Geologic probability of discovery--based on data in application
(question #16, 17, 18, 20 and 22)*

Mines or Survey reports, etc., do you rate chances:

a) Good Fair

b) Poor

c) None

d) Don't know--needs field examination Needs field examination

e) Is there an alternative and favorable project? Unknown
(If so, attach an explanation)

5. Is the applicant's right to the property clearly stated? Yes
(question 5, 6, 7)*

6. If applicant is a lessee, is a copy of the lease attached? Yes

Does the lease have sufficient time to run to cover a future

productive period? Yes

*question numbers are those of MF-103

7. Are subordination agreements necessary? **Yes**

   a) MF-201? _____

   b) MF-202? **Landlord's Subordination Agreement**

8. From the data presented, does the proposed project appear feasible from the point of view of:

   a) Available manpower **Yes**

   b) Equipment and supplies **Yes**
      (question 14 plus general knowledge of availability)*

   c) Accessibility (question 12)* **Yes**

   d) Water (question 13)* **Yes**

   e) Power (question 13)* **Yes**

   Is a field check needed on any of these points? **Field team should investigate**

9. Does the experience of the applicant appear to be adequate to assure that he can properly conduct the proposed project? (question 4)* **Yes**

   _____

   Is a field check needed on this point? **Field team should investigate**

10. Exhibit A. (question 21 and 22)*

   a) Is the project adequately described? **No**

      If not, are there sufficient data given so that you can describe the project? **No** If so, attach a draft.

   b) Is there an adequate map or sketch of the proposed work? **No**

      _____

   c) Is the proposed work "exploration" under the definition of Section 8, MO-5? **Yes**

      If not, what part of it is? _____

Is this part a worthwhile exploration project? Unknown

d) Are the cost estimates detailed? Yes

Can they be summarized, as on page 2 of Procedural Instruction 5-A, from the available data? No If so, attach a draft.

e) Are the cost estimates reasonable? Appear too high

f) Should more information be requested from applicant? Yes

g) Is a field examination necessary to complete Exhibit A? Yes

11. Exhibit B (question 23-d)*

a) Is it applicable? Yes

b) If so, are sufficient data furnished? No If so, attach a draft.

c) Is a field check needed? Yes

12. Exhibit C (question 23-e, f and g)*

a) Is it applicable? Yes

b) Sufficient data? No If so, attach a draft.

c) Are rents and charges reasonable? Unknown

d) Is a field check needed? Yes

13. Exhibit D (question 23-a, b)*

a) Are there sufficient data? No

b) Is the schedule adequate for the work proposed? Unknown

c) Is the schedule excessive for the work proposed? Unknown

d) Are the proposed wages and salaries reasonable? Unknown

e) Is a field check needed? Yes

14. Exhibit E (question 23-c)*

a) Is it applicable? Yes

b) Sufficient data? No

c) Reasonable? Unknown

d) Field check needed? Yes

15. In your judgment, can the proposed work be done in the proposed time? Yes

(All exploration must be completed within two years)

16. If field examination is not needed, attach your recommendation.

17. If field examination is needed, do you have any special instructions for the field team not indicated by your answers to the foregoing question? This property requires sampling and mapping to determine the geological setting and possibility of making a significant mineral discovery. If an exploration project is to be recommended, the field team is to assist the applicant in forming an amended application to fit the proposed work, and to see that all data essential to the contract are included.

Enclosures:

1 - MF-100
1 - MF-103 with map
1 - USGS Opinion
1 - USBM Opinion
1 - Annual Report of Operator (1950)
1 - "Lease and Option to Purchase

Reviewed by: Gentry on 2/4/52 and Brewer on 3/27/52

Date March 27, 1952

cc: ~~XXXXX~~
✓Field Team Reg. III (2)
Docket
Operating Committee

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39 FLORIDA

TELEPHONE 5-0921

March 20, 1952

Iron and Ferro Alloys Division
Defense Minerals Exploration Administration
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA 2289X - Tungsten
Gold King Nos. 1 and 2 claims
Black Horse Vein
Black Horse Mining District
White Pine County, Nevada

Att: Mr. G. C. Selfridge

Dear Sir:

We inclose six copies of Form MF-202, Landlords Subordination Agreement, required for loan application Docket Number 2289X.

We are sorry it took so long to obtain this agreement, but the landlords were hesitant about signing.

Sincerely yours

GRAHAM DEVELOPMENT CORPORATION
Charles R. Graham
Charles R. Graham, President

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 21 1952

FILE COPY
SURNAME:

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

Mr. Charles R. Graham, President
Graham Development Corporation
1000 Lincoln Road
Miami Beach 39, Florida

FEB 19 1952

Re: Docket No. DMEA 2289 - Tungsten
Gold King Nos. 1 & 2 Claims
Black Horse Vein
Black Horse Mining District
White Pine County, Nevada

Dear Mr. Graham:

Receipt of your letter of February 9, 1952, is acknowledged.

You assume correctly that the only lien against the property is that defined under Section 13 of MO-5, as amended. Thus, a discovery or development must first be certified within the 6-months' period mentioned before the lien attaches. Then it applies only to the production resulting from the discovery or development as certified.

In some instances the Government will waive the Landlord's Subordination Agreement and accept the applicant's personal guarantee in lieu thereof when the applicant is unable to obtain the former.

On the subordination form, the date of contract is left blank until the application has been completely processed and the contract drawn up and approved.

We are enclosing herewith a copy of MO-5, as amended, and a blank copy of the contract form MF-200. Possibly these may help you in solving your present problem.

Sincerely yours,

George C. Selfridge

G. C. Selfridge, Acting Chief
Iron and Ferro-Alloy Division

P.N. 2-19-52

Enclosures 2

G.G.Gentry:G.C.Selfridge:ls 2/18/52

cc: Admn. Reading File
Docket
Field Team, Reg. 3
G. G. Gentry
R. W. Geehan, USBM
D. M. Lemmon, USGS
G. C. Selfridge

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

February 15, 1952

Memorandum

To: George Selfridge, D.M.E.A.

From: Robt. W. Geehan, Bureau of Mines

Subject: Exploration Application $56,200 DMEA 2289
Graham Development Corporation Tungsten
Gold King Nos. 1 and 2.
White Pine County, Nevada

I suggest the application be referred to the field team for examination and recommendations.

Robert W. Geehan

Robert W. Geehan

Copy for 400

400
FILE COPY
SURNAME:

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

Selfridge
Miller

FEB 11 1952

Mr. Charles R. Graham, President
Graham Development Corporation
1000 Lincoln Road
Miami Beach 39, Florida

Re: Docket No. DMEA 2289X - Tungsten
Gold King Nos. 1 and 2 claims
Black Horse vein
Black Horse Mining District
White Pine County, Nevada

Dear Mr. Graham:

This is in reply to your letter of February 6, 1952, inquiring as to the status of the above-referenced application.

We have reviewed the application and on February 6 mailed you a letter requesting six completed copies of the Landlord's Subordination Agreement, which are necessary when the applicant is a lessee.

On receipt of the subordination agreement, the application will be referred to a regional office for a field examination of the property to secure additional data necessary before the application can be considered further. Until we receive the information from the field, we cannot definitely say whether or not the application will be recommended for approval.

If we can be of further aid, please write us.

Sincerely yours,

George C. Selfridge

G.C.S.
2-11-52

GCSelfridge:ls
2/8/52

G. C. Selfridge, Acting Chief
Iron and Ferro-Alloy Division

Copy to: Admn. Reading File
Docket
Field Team, Region 3
R. W. Geehan, USBM
D. M. Lemmon, USGS
G. C. Selfridge

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39 FLORIDA

TELEPHONE 5-0921

February 9, 1952

Defense Minerals Exploration Administration
Department of the Interior
Washington 25, D. C.

Att: Mr. G. C. Selfridge, Iron & Ferro Alloy Div.
Re : Docket No. DMEA 2289X - Tungsten

Dear Mr. Selfridge:

Reference is made to your letter of Feb. 5 (or 6), 1952, regarding our loan application Docket No. DMEA 2289.

We received for execution Form MF-202, Landlords Subordination Agreement. Paragraph 1 refers to an Exploration Project Contract dated _____, 195_. We do not have a copy of this contract to date.

We doubt if it would be possible to persuade the fee owner of the property to sign this agreement since we do not have a copy of the contract. Could you supply us with data which will enable us to explain to the fee owner what his liability would be under the subordination agreement.

We assume that the only lien against the property would be that defined under Section 13, M.O.-5. However, I believe we would need confirmation of this from you before the fee owner would agree to sign.

We hope you understand our problem. If not, would you please call us collect.

Sincerely yours

GRAHAM DEVELOPMENT CORPORATION

Charles R. Graham

Charles R. Graham, President

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 11 1952

FILE COPY
SURNAME:

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

Gentry
Selfridge
Miller

FEB 6 1952

Mr. Charles R. Graham, President
Graham Development Corporation
1000 Lincoln Road
Miami Beach 39, Florida

Re: Docket No. DMEA 2289X - Tungsten
Black Horse Mine
White Pine County, Nevada

Dear Mr. Graham:

Before we can proceed further in the consideration of the subject docket, it will be necessary that you furnish us with six signed and dated copies of the seven enclosed copies of Landlord's Subordination Agreement, Form MF-202.

May we hear from you at your earliest convenience.

Sincerely yours,

Signed D.H. 2-6-52

G. C. Selfridge, Acting Chief
Iron and Ferro-Alloy Division

Enclosures

GGGentry:ls
2/4/52

Copy to: Admn. Reading File
Docket
Field Team, Region III
Mr. D. M. Lemmon, USGS
Mr. R. W. Geehan, USBM
G. C. Selfridge
G. G. GEntry

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39 FLORIDA

TELEPHONE 5-0921

Re: Docket DMEA-2289

February 6, 1952

Defense Minerals Exploration Adm.
Iron and Ferro-Alloys Division
Department of the Interior
Washington 25, D. C.

Dear Sirs:

Reference is made to our loan application docket No. DMEA-2289, Iron and Ferro-Alloys Division.

We would greatly appreciate information on the status of this loan application. We realize that you need time to determine the desirability of granting this loan. However, a word of encouragement would help our morale since it is costing us about $ 600 per week to carry on our present operation.

If you do not have time to answer this letter, we would appreciate a collect telegram or telephone call, especially if there is any reason why this loan could not be approved, since it would materially alter our plans.

We apologize for troubling you, and we thank you for your consideration.

Sincerely yours

GRAHAM DEVELOPMENT CORPORATION

Charles R. Graham

Charles R. Graham, President

DEFENSE MINERALS
ADMINISTRATION
WASHINGTON, D. C.
FEB 8 8 55 PM '52

STANDARD FORM NO. 64

Office Memorandum • UNITED STATES GOVERNMENT

TO : George Selfridge, DMEA DATE: January 2, 1952

FROM : D. M. Lemmon, U. S. Geological Survey

SUBJECT: Exploration loan $56,200 DMEA 2289 - Tungsten
Graham Development Corporation
1000 Lincoln Road
Miami Beach 39, Florida

Property: Gold King Nos. 1 and 2 claims
Black Horse vein
Black Horse Mining District
White Pine County, Nevada

Proposal: It is proposed to sink the shaft 200 feet below the 120-foot level, cut stations on the 200- and 300-foot levels, and on each level drift 200 feet and cross-cut 150 feet. The total work amounts to 200 feet of shaft and 700 feet of drifts and crosscuts.

Geology: Scheelite is present in a quartz vein in limestone. At the surface the vein was 2 feet thick. The applicant states that 528 units of WO_3 were recovered in the shaft workings.

The map and projection submitted by the applicant do not show geology. The distribution of stopes suggests very spotty mineralization.

Conclusions: Sufficient information is not at hand to tell whether further exploration of the property is warranted. The amount of ore developed on the 120-level should be determined before the proposed exploration is approved. No apparent reason exists for the amount of crosscuts proposed, and the composite map of workings suggests that the upper workings are poorly planned. Successful completion of work on the 200 level should precede approval of sinking to the 300 level.

The costs quoted are excessive for the amount of work proposed.

Recommendation: It is recommended that the application be referred to the Field Team, Region III, San Francisco for field examination to determine whether the property warrants further exploration.

DM Lemmon

1 cy for 400

EXPLORATION

Subject: DMEA-2289
Re: Exploration Loan
Gold King One & Two

Mr. Charles R. Graham, President
Graham Development Corporation
1001 Lincoln Road
Miami Beach 39, Florida

My dear Mr. Graham:

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-2289 and referred to the Iron & Ferro-Alloys Division.

Kindly refer to DMEA-2289 in any future correspondence relating to your application.

Sincerely yours,

ROBERT E. ADAMS

Robert E. Adams
Acting Administrative Officer

Note - no authorization
Value of equipment on ground

7862

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 14 1951
DMEA-2 289

GRAHAM DEVELOPMENT CORPORATION
TEN HUNDRED LINCOLN ROAD
MIAMI BEACH 39 FLORIDA

TELEPHONE 5-0921

December 12, 1951

Defense Minerals Administration
Department of the Interior
Washington 25, D. C.

Subject: Application for DMA Loan

Dear Sirs

We inclose four copies each of executed Forms MF-100 and MF-103, applications for loans to aid in the development of our Tungsten mine in White Pine County, Nevada.

We are currently exploring in our mine at a depth of 100 Feet. Indications are that better grade ore will be found at the 200 or the 300 foot level. We are requesting this loan to help us Finance the cost of carying the exploration work down from the 100 foot level to the 300 foot level.

The cost of the project is estimated to be $ 56,200. The Graham Development Corporation proposes to pay for 25% of this if the government will finance the balance. This would enable us to put on a second shift of miners and complete the exploration work in ten months or less. If we cannot obtain the loan, we plan to abandon the project and return to our business of exploring for gold, as we cannot carry out this project fast enough with the funds we have available.

There is $ 7,700. set up in the estimate for new equipment. Only a small part of this will be required if our present pumps will handle the water at the lower level, and if we can rent rather than buy two trailers to house the men who will reside at the mine. This would reduce the amount of money required for the project to about $ 51,000.

Since we now have a working organization at the mine, we hope you will be able to expedite approval or disapproval of this application. If we should decide to cease operations at the tungsten mine, it might cost an additional $ 5,000 to move back there again. To November 30, we have spent over $ 14,000 in getting set up at this mine without any aid from the government.

Sincerely yours

GRAHAM DEVELOPMENT CORPORATION

Charles R. Graham

Charles R. Graham
President