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

DOCKET COPY

Office of
Executive Officer
DMEA Field Team
Region III

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

January 14, 1955

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

It is agreed this 14 day of January, 1955, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Irene Sykes, Nina, Nevada, hereinafter called the "Operator," parties to that certain Exploration Project Contract IDM-[illegible], Docket DMEA-[illegible], dated 3rd day of July, 1953, that the said contract shall be and is hereby terminated as of the first date above written.

Any work presented or costs incurred by the Operator after the date first above written shall be for the sole account of the Operator, except for (a) such necessary and reasonable costs and expenses as may be incurred in preserving and disposing of any facilities, buildings, fixtures, equipment, or other items, to the cost of which the Government has contributed and in which the Government has an equity, and (b) the costs of any reports, accounts, and winding-up and settlement actions provided for in the contract.

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

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

UNITED STATES OF AMERICA

By [signature]
E. G. Miller, Executive Officer
DMEA Field Team, Region III

By [signature]
Irene Sykes, Operator

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration

DEC 1 6 1952

DOCKET COPY

APPROVAL OF SUBCONTRACT

To: Mrs. Irene Sykes, 1239 S. Beverley Glen Blvd., Los Angeles 27, California

That certain contract, a copy of which you have submitted with your request for approval, dated November 26, 1952, between you and Continental Drilling Company for the performance of the following work:

> Drilling 640 lineal feet of BX, AX and EX diamond drill hole under Stage I, and an additional 385 lineal feet under Stage II, dependent upon satisfactory completion of Stage I and approval by the Government that the results of the work under Stage I warrant undertaking work under Stage II, on the Rock Hill Mines (Irene Sykes) Property, Esmeralda County, Nevada

which is a specific element of the work described in an Exploration Project Contract, dated July 3, 1952, Idm-E366, Docket No. DMEA-2381, is hereby approved by the United States of America, subject to all of the terms and conditions relating to such independent contracts set forth in said Exploration Project Contract.

Dated: December 1, 1952

THE UNITED STATES OF AMERICA

By R. C. Miller
R. C. Miller, Executive Officer
DMEA Field Team, Region III

Copy to: DMEA, Washington (3)
A. C. Johnson, Reno
Finance Officer, Region III
E. H. Bailey
George Mavor

RCL
12/23/52

November 26, 1952

Mrs. Irene Sykes
1239 S. Beverley Glen Boulevard
Los Angeles 27, California

Dear Mrs. Sykes:

This will confirm our agreement of today:

We will drill 640 lineal feet of BX, AX, and EX core holes on your property known as Rock Hill Mines located in Esmeralda County, Nevada for a price of $7.00 per lineal foot. Any casing, cementing, or water hauling necessary to complete the work to be at our expense.

You agree to guarantee us 640 lineal feet of core drilling. Work to start as soon as reasonable possible. If additional footage is required we will drill up to 1,500 lineal feet at the above price.

If this meets with your approval will you kindly indicate your acceptance on a copy hereof.

Yours very truly,

CONTINENTAL DRILLING COMPANY

Original signed by R. F. Thies

By_____
R. F. Thies

Accepted this 26th day
of November, 1952

By Irene Sykes
Irene Sykes

RCA
12/2

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

DOCKET DMEA 2381

COMMODITY Tungsten
Idm-8366

Docket Copy

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

EXPLORATION PROJECT CONTRACT[1]

IT IS AGREED this 3rd day of July, 1952, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and[2] Irene Sykes
Mina, Nevada

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 Esmeralda, described as follows:[3] 9 contiguous unpatented lode mining claims in Sections 34 and 35, T. 4 N., R. 36 E. and Section 3, T. 3 N., R. 36 E., Mount Diablo Meridian, recorded in the courthouse at Goldfield, Esmeralda County, Nevada, as indicated on the maps entitled "Fig. 1--Location Map" and "Fig. 2--Property of Irene S. Sykes", and the Operator represents and undertakes:[4] Annex I attached hereto and made a part hereof.

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

None

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

ARTICLE 3. *Exploration project.*—The Operator, within sixty (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 six (6) months from the date of this contract. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

ARTICLE 8. *Payments by the Government.*—(*a*) The Government will pay 75 percent of the allowable costs incurred, as they accrue, in an aggregate total amount not in excess of $ 7,950.00, which is 75 percent of $ 10,600.00, the agreed, estimated total cost of the project in which the Government will participate; *Provided,* that until the Operator's final report and final accounting have been rendered to the Government, and any final auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract.

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

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

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

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

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

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

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

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

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

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

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

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

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By [signature]
for Acting Administrator
Defense Minerals Exploration Administration

Irene Sykes
(Operator)

By Irene Sykes

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

_____

[CORPORATE SEAL]

MAR 28 1952

IRENE SYKES
GENERAL MINERALS COMPANY
EXPLORATION PROJECT CONTRACT
ROCK HILL MINE
DOCKET NO. DMRA-2381

EXHIBIT "A"

Description of Work

Stage I

Time Schedule: 0 - 2 months

The project consists of 2 trenches and 5 diamond drill holes. Fig. 4 attached hereto and made a part hereof shows approximate location of trenches and drill holes. The exact location shall be designated by the Operator subject to approval by the Government.

The 2 trenches shall crosscut the mineralized zone to show trend, width and contacts. This work shall be done with hand tools, if necessary, using a few single jack holes to define the contacts.

The diamond drill shall be located approximately 70 feet easterly from No. 1 outcrop of the mineralized area and the holes shall be drilled at right angles to the contacts and at 50 foot intervals.

The diamond drill holes shall be of AX size and have an approximate dip and length as tabulated below:

Hole No.	Dip from Horizontal	Length	Vertical depth at which the Hole cuts the mineralized Zone
1	40°	105'	61'
2	46°	115'	76'
3	51°	125'	90'
4	56°	140'	108'
5	60°	155'	126'
Total hole length		640'	

Stage II

Time Schedule: 2 - 3 months

This work will be undertaken only after the completion of Stage I to the satisfaction of and approval by the Government and only if the Government indicates the results of the work under Stage I warrants undertaking the work under Stage II.

Fig. 4 shows the approximate location of trenches and drill holes. The exact location to be designated by the Operator subject to approval by the Government.

The two trenches shall crosscut the mineralized zone to show trend, width and contacts. This work shall be done with hand tools, if necessary, using a few single jack holes to define the contacts.

The diamond drill shall be located approximately 70 feet southerly from the No. 2 outcrop of the mineralized area and the holes shall be drilled at right angles to the contacts, at 50 foot intervals.

The diamond drill holes shall be of AX size and have an approximate dip and length as tabulated below:

Hole No.	Dip from Horizontal	Length	Vertical depth at which the Hole cuts the mineralized Zone
6	40°	105'	61'
7	51°	125'	90'
8	60°	155'	126'
Total hole length		385'	

All diamond drill cores from the mineralized zone shall be split and sent to a custom assayer to be mutually agreed upon. The balance of the core shall be retained by the Operator.

Estimated Costs of the Project
(*Indicates allowable maximum)

(1) Independent Contracts

Stage I

640 feet of diamond drilling @ $7.00/ft.		$4,480.00*

Stage II

385 feet of diamond drilling @ $7.00/ft.		2,695.00*

Note: All subcontracts are subject to prior written approval by the Government.

(2) Labor, Supervision, Consultants

Stage I

1 Supervisor-geologist @ $500.00/mo., 2 months	$1,000.00*	
1 Miner and general utility man, $14.00/day, 40 days	560.00	1,560.00*

Stage II

1 Supervisor-geologist @ $500.00/mo., 1 month	500.00*	
1 Miner and general utility man, $14.00/day, 20 days	280.00	780.00*

Note: The supervisor-geologist shall make a geological map of the area, log the diamond drill holes and make monthly progress reports.

(3) Operating Materials and Supplies

Stage I

Tools, powder, fuse, caps, gasoline, oil and miscellaneous	100.00

Stage II

Tools, powder, fuse, caps, gasoline, oil and miscellaneous	$ 50.00

(4) Operating Equipment

Stage I

To be purchased

None

To be rented

1 Pickup truck @ $100.00/mo., (includes maintenance) 2 months	200.00

To be furnished by the Operator

None

Stage II

To be purchased

None

To be rented

1 Pickup truck @ $100.00/mo., (includes maintenance) 1 month	100.00

To be furnished by the Operator - None

(5) Rehabilitation and Repairs

Stages I and II

None

(6) New Buildings, Improvements and Installations

Stages I and II

None

(7) **Miscellaneous**

Stage I		
Sample sacks	$ 10.00	
Assaying, 20 samples @ $4.00/ each	80.00	
Core boxes	60.00	
Payroll taxes, Workmen's Compensation and Employers' Liability Insurance	150.00	$ 300.00
Stage II		
Assaying, 10 samples @ $4.00/ each	40.00	
Core boxes	35.00	
Payroll taxes, Workmen's Compensation and Employers' Liability Insurance	75.00	150.00

(8) **Contingencies**

Stage I		120.00
Stage II		65.00
Total Cost of Project		$10,600.00*

SUMMARY

Total cost of Stage I	$6,760.00*	
Total cost of Stage II	3,840.00*	
TOTAL COST OF PROJECT		$10,600.00*
GOVERNMENT PARTICIPATION @ 75%		$ 7,950.00*

IRENE SYKES

CLAIMS OF ~~GENERAL TUNGSTEN COMPANY~~

ANNEX I

Surveyed claims tied into corner common to Sections 34 and 35, T. 4 N., R. 36 E., and Section 3, T. 3 N., R. 36 E., Mount Diablo Meridian are as follows:

Name of Claim	Located
Half Moon No. 2	May 30, 1951
Half Moon No. 3	July 14, 1951
Half Moon No. 1	Sept. 11, 1951
Half Moon Tungsten	Sept. 11, 1951
Half Moon No. 4	Oct. 9, 1951
Half Moon Fraction	- - - - - - - -

Unsurveyed claims as follows:

Half Moon No. 5

Rock Hill

Rock Hill No. 1

All shown on Fig. 2.

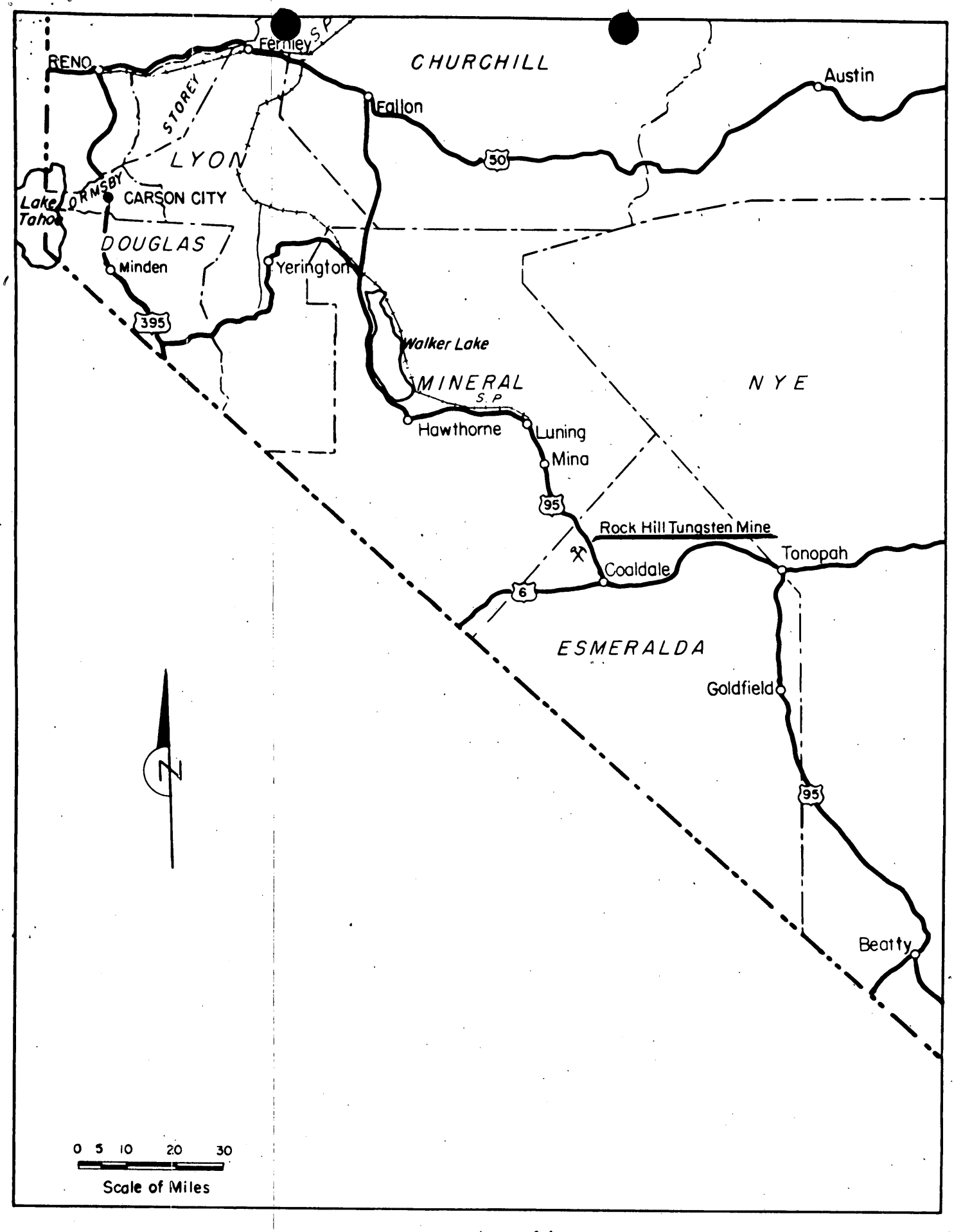
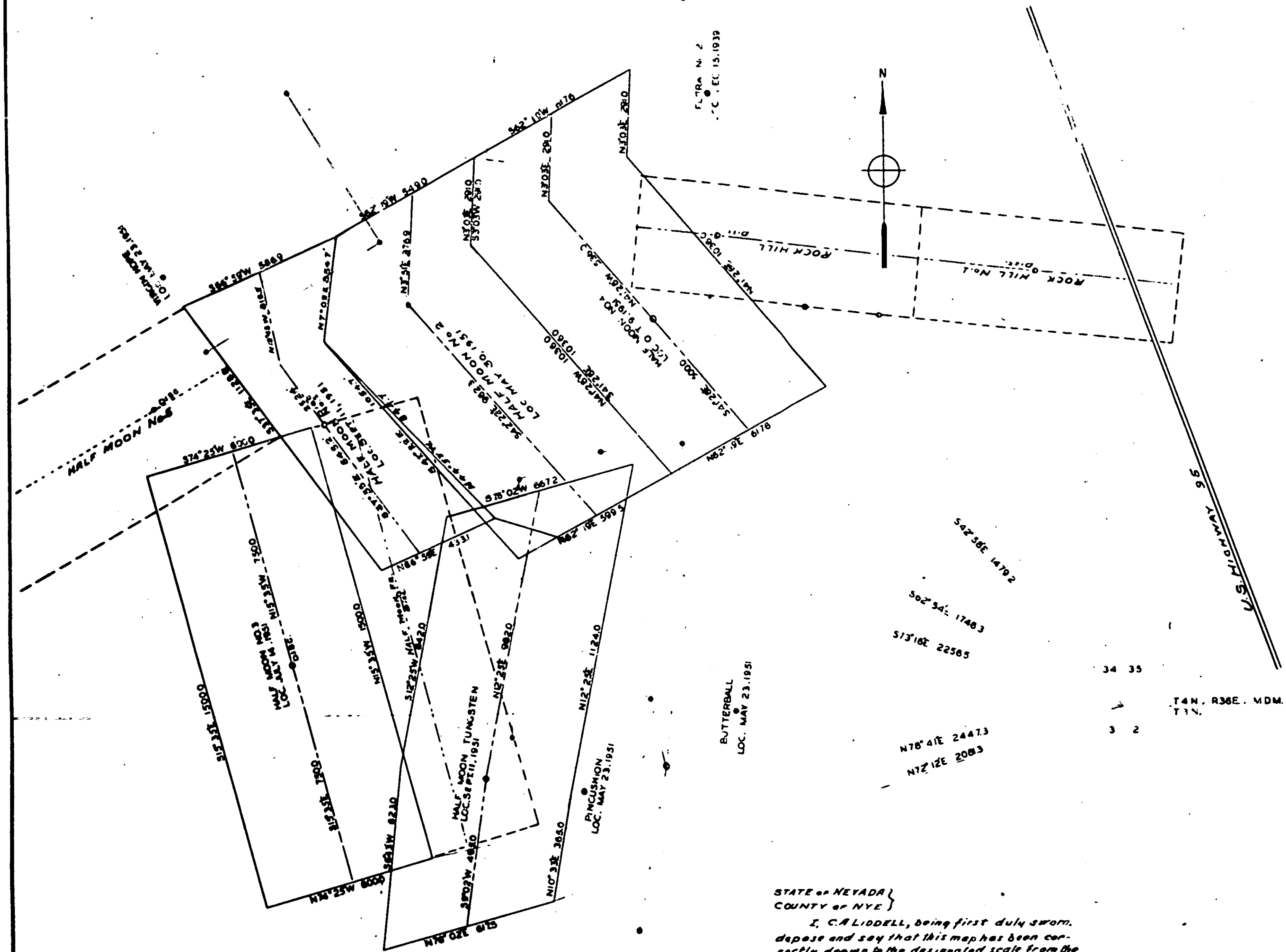


Fig. 1 Location Map



STATE of NEVADA }
COUNTY of NYE }

I, C.A. LIDDELL, being first duly sworn, depose and say that this map has been correctly drawn to the designated scale from the field notes of a survey made by R.B. Jones, under my supervision in October, 1951; that it truly and correctly shows the position of the lode claims as staked upon the ground.

C.A. Liddell
Mineral Surveyor for Nevada

Subscribed and sworn to before me Nov. 10, 1951.

[signature]

Notary Public in and for Mineral County, Nevada

FIG. 2

PROPERTY OF IRENE & SYKES MINA, NEVADA.		
ENGINEER - R.B. JONES	UNSURVEYED CLAIMS SHOWN by DOTTED LINES.	
OCT. 26, 1951	SCALE 1"=200'	MINA, NEVADA

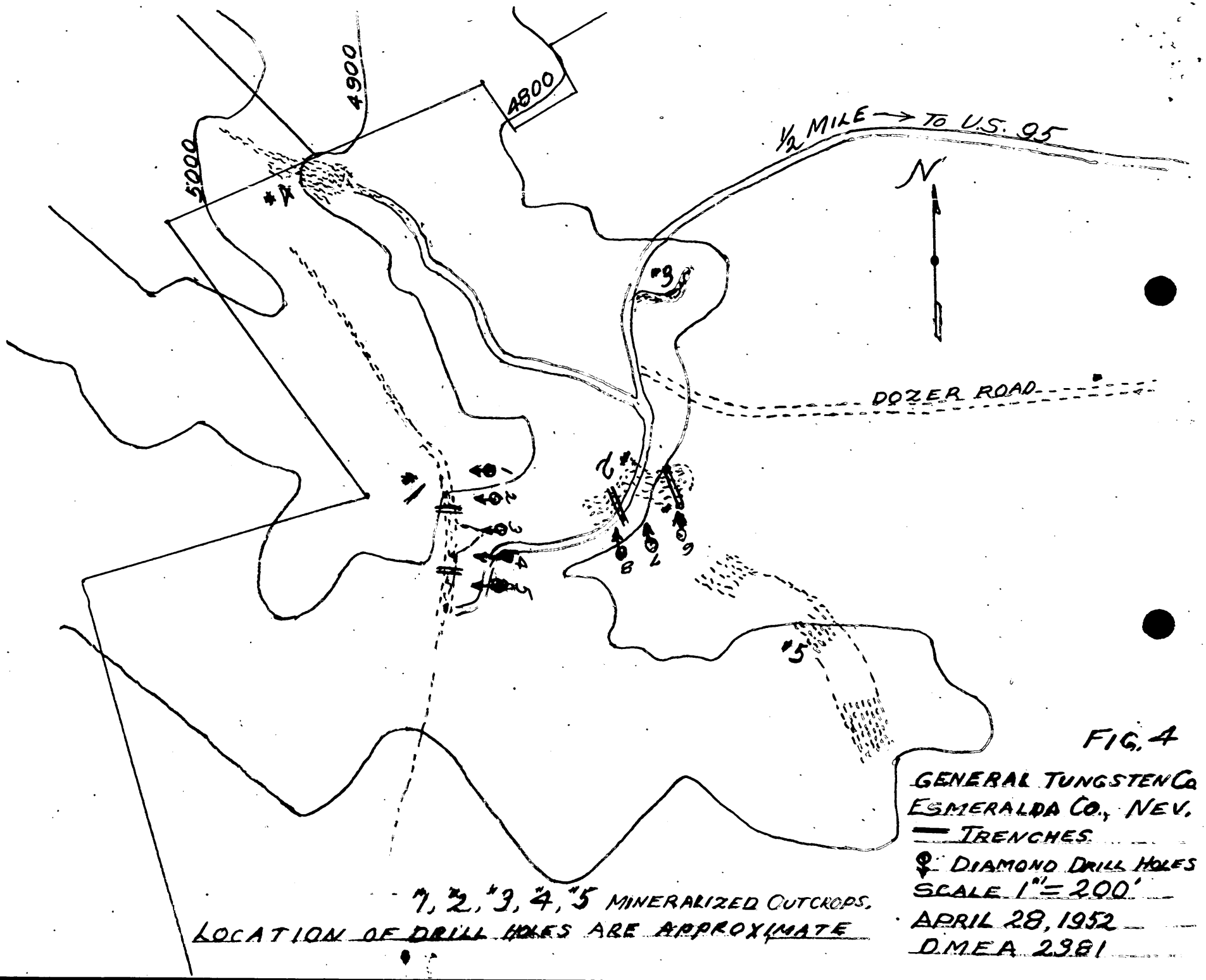


FIG. 4

GENERAL TUNGSTEN CO.
ESMERALDA CO., NEV.
— TRENCHES
DIAMOND DRILL HOLES
SCALE 1" = 200'
APRIL 28, 1952
DMEA 2981

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

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

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

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

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

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

ARTICLE 8. *Payments by the Government.*—(*a*) The Government will pay 75 percent of the allowable costs incurred, as they accrue, in an aggregate total amount not in excess of $7,500.00, which is 75 percent of $10,000.00, the agreed, estimated total cost of the project in which the Government will participate; *Provided,* that until the Operator's final report and final accounting have been rendered to the Government, and any final auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract.

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

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

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

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

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

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

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

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

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

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

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

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

Executed in sextuplicate the day and year first above written.

GENERAL TUNGSTEN COMPANY (a limited partnership)

Ralph [illegible]. Thompson (Operator) Charles S. Payson

By

Harry Lee Martin Irene Sykes

THE UNITED STATES OF AMERICA

By

Acting Administrator
Defense Minerals Exploration Administration

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

[CORPORATE SEAL]

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

DOCKET [redacted] DMEA: 2391

COMMODITY: Tungsten

✓Extra Copy
Idm-E366

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

EXPLORATION PROJECT CONTRACT [1]

IT IS AGREED this 3rd day of July, 1952, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and [2] The General Tungsten Company, a limited partnership between Ralph E. [illegible], [illegible] L. [illegible], [illegible] and Irene [illegible] (General Partner), c/o Mrs. Irene [illegible], [illegible], Nevada.

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 Esmeralda, described as follows: [3] [illegible] unpatented lode mining claims in Sections 34 and 35, T. 4 N., R. 36 E. and Section 3, T. 3 N., R. 36 E., Mount Diablo Meridian, recorded in the Courthouse at Goldfield, Esmeralda County, Nevada, as indicated on the map entitled "Fig. [illegible] Location Map" and "Fig. 2--Property of Irene S. [illegible]" the Operator represents and undertakes: [illegible] Exhibit A attached hereto and made a part hereof.

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

None

[redacted] attached.

The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof.

ARTICLE 3. *Exploration project.*—The Operator, within [illegible] 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 [illegible] from the date of this contract. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GENERAL TUNGSTEN COMPANY
EXPLORATION PROJECT CONTRACT
ROCK HILL MINE
DOCKET NO. DMEA-2381

EXHIBIT "A"

Description of Work

Stage I

Time Schedule: 0 - 2 months

The project consists of 2 trenches and 5 diamond drill holes. Fig. 4 attached hereto and made a part hereof shows approximate location of trenches and drill holes. The exact location shall be designated by the Operator subject to approval by the Government.

The 2 trenches shall crosscut the mineralized zone to show trend, width and contacts. This work shall be done with hand tools, if necessary, using a few single jack holes to define the contacts.

The diamond drill shall be located approximately 70 feet easterly from No. 1 outcrop of the mineralized area and the holes shall be drilled at right angles to the contacts and at 50 foot intervals.

The diamond drill holes shall be of AX size and have an approximate dip and length as tabulated below:

Hole No.	Dip from Horizontal	Length	Vertical depth at which the Hole cuts the mineralized Zone
1	40°	105'	61'
2	46°	115'	76'
3	51°	125'	90'
4	56°	140'	108'
5	60°	155'	126'
Total hole length		640'	

Stage II

Time Schedule: 2 - 3 months

This work will be undertaken only after the completion of Stage I to the satisfaction of and approval by the Government and only if the Government indicates the results of the work under Stage I warrants undertaking the work under Stage II.

Fig. 4 shows the approximate location of trenches and drill holes. The exact location to be designated by the Operator subject to approval by the Government.

The two trenches shall crosscut the mineralized zone to show trend, width and contacts. This work shall be done with hand tools, if necessary, using a few single jack holes to define the contacts.

The diamond drill shall be located approximately 70 feet southerly from the No. 2 outcrop of the mineralized area and the holes shall be drilled at right angles to the contacts, at 50 foot intervals.

The diamond drill holes shall be of AX size and have an approximate dip and length as tabulated below:

Hole No.	Dip from Horizontal	Length	Vertical depth at which the Hole cuts the mineralized Zone
6	40°	105'	61'
7	51°	125'	90'
8	60°	155'	126'
Total hole length		385'	

All diamond drill cores from the mineralized zone shall be split and sent to a custom assayer to be mutually agreed upon. The balance of the core shall be retained by the Operator.

Estimated Costs of the Project
(*Indicates allowable maximum)

(1) Independent Contracts

Stage I

640 feet of diamond drilling @ $7.00/ft.		$4,480.00*

Stage II

385 feet of diamond drilling @ $7.00/ft.		2,695.00*

Note: All subcontracts are subject to prior written approval by the Government.

(2) Labor, Supervision, Consultants

Stage I

1 Supervisor-geologist @ $500.00/mo., 2 months	$1,000.00*	
1 Miner and general utility man, $14.00/day, 40 days	560.00	1,560.00*

Stage II

1 Supervisor-geologist @ $500.00/mo., 1 month	500.00*	
1 Miner and general utility man, $14.00/day, 20 days	280.00	780.00*

Note: The supervisor-geologist shall make a geological map of the area, log the diamond drill holes and make monthly progress reports.

(3) Operating Materials and Supplies

Stage I

Tools, powder, fuse, caps, gasoline, oil and miscellaneous		100.00

Stage II

Tools, powder, fuse, caps, gasoline, oil and miscellaneous	$ 50.00

(4) Operating Equipment

Stage I

To be purchased

None

To be rented

1 Pickup truck @ $100.00/mo., (includes maintenance) 2 months	200.00

To be furnished by the Operator

None

Stage II

To be purchased

None

To be rented

1 Pickup truck @ $100.00/mo., (includes maintenance) 1 month	100.00

To be furnished by the Operator - None

(5) Rehabilitation and Repairs

Stages I and II

None

(6) New Buildings, Improvements and Installations

Stages I and II

None

(7) **Miscellaneous**

Stage I		
Sample sacks	$ 10.00	
Assaying, 20 samples @ $4.00/each	80.00	
Core boxes	60.00	
Payroll taxes, Workmen's Compensation and Employers' Liability Insurance	150.00	$ 300.00
Stage II		
Assaying, 10 samples @ $4.00/each	40.00	
Core boxes	35.00	
Payroll taxes, Workmen's Compensation and Employers' Liability Insurance	75.00	150.00

(8) **Contingencies**

Stage I		120.00
Stage II		65.00
Total Cost of Project		**$10,600.00***

SUMMARY

Total cost of Stage I	$6,760.00*	
Total cost of Stage II	3,840.00*	
TOTAL COST OF PROJECT		**$10,600.00***
GOVERNMENT PARTICIPATION @ 75%		**$ 7,950.00***

CLAIMS OF GENERAL TUNGSTEN COMPANY

ANNEX I

Surveyed claims tied into corner common to Sections 34 and 35, T. 4 N., R. 36 E., and Section 3, T. 3 N., R. 36 E., Mount Diablo Meridian are as follows:

Name of Claim	Located
Half Moon No. 2	May 30, 1951
Half Moon No. 3	July 14, 1951
Half Moon No. 1	Sept. 11, 1951
Half Moon Tungsten	Sept. 11, 1951
Half Moon No. 4	Oct. 9, 1951
Half Moon Fraction	- - - - - - -

Unsurveyed claims as follows:

Half Moon No. 5

Rock Hill

Rock Hill No. 1

All shown on Fig. 2.

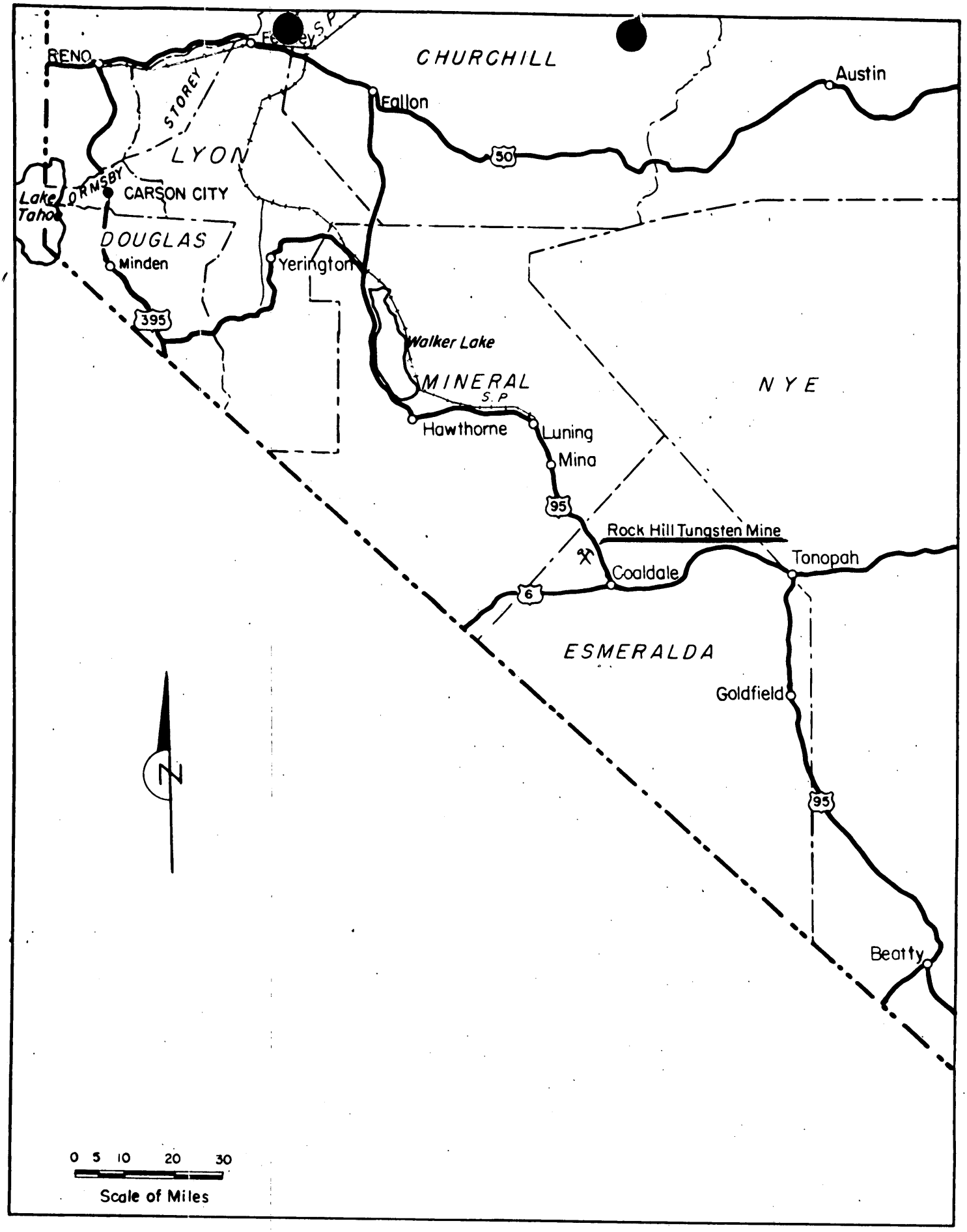


Fig. 1 Location Map

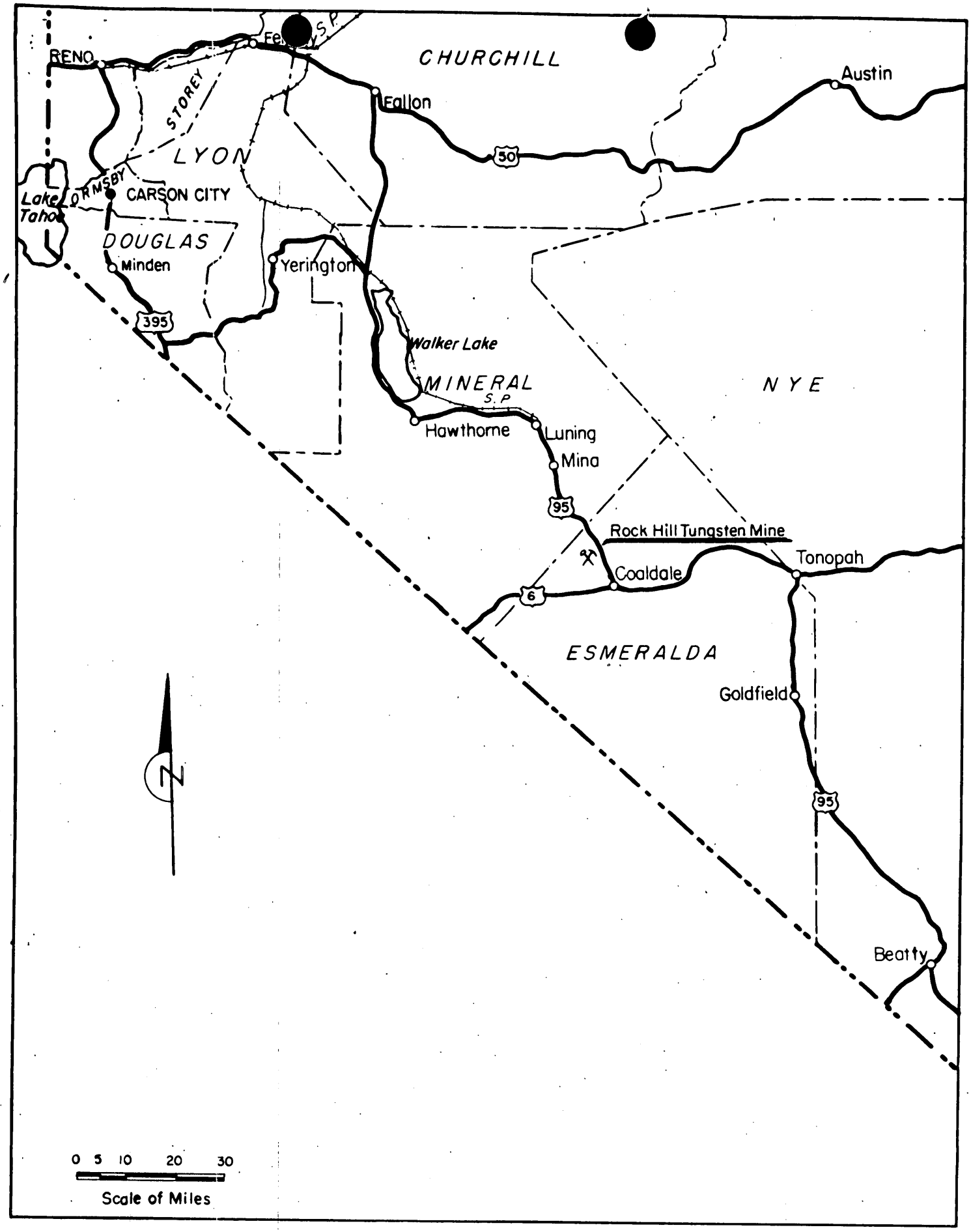
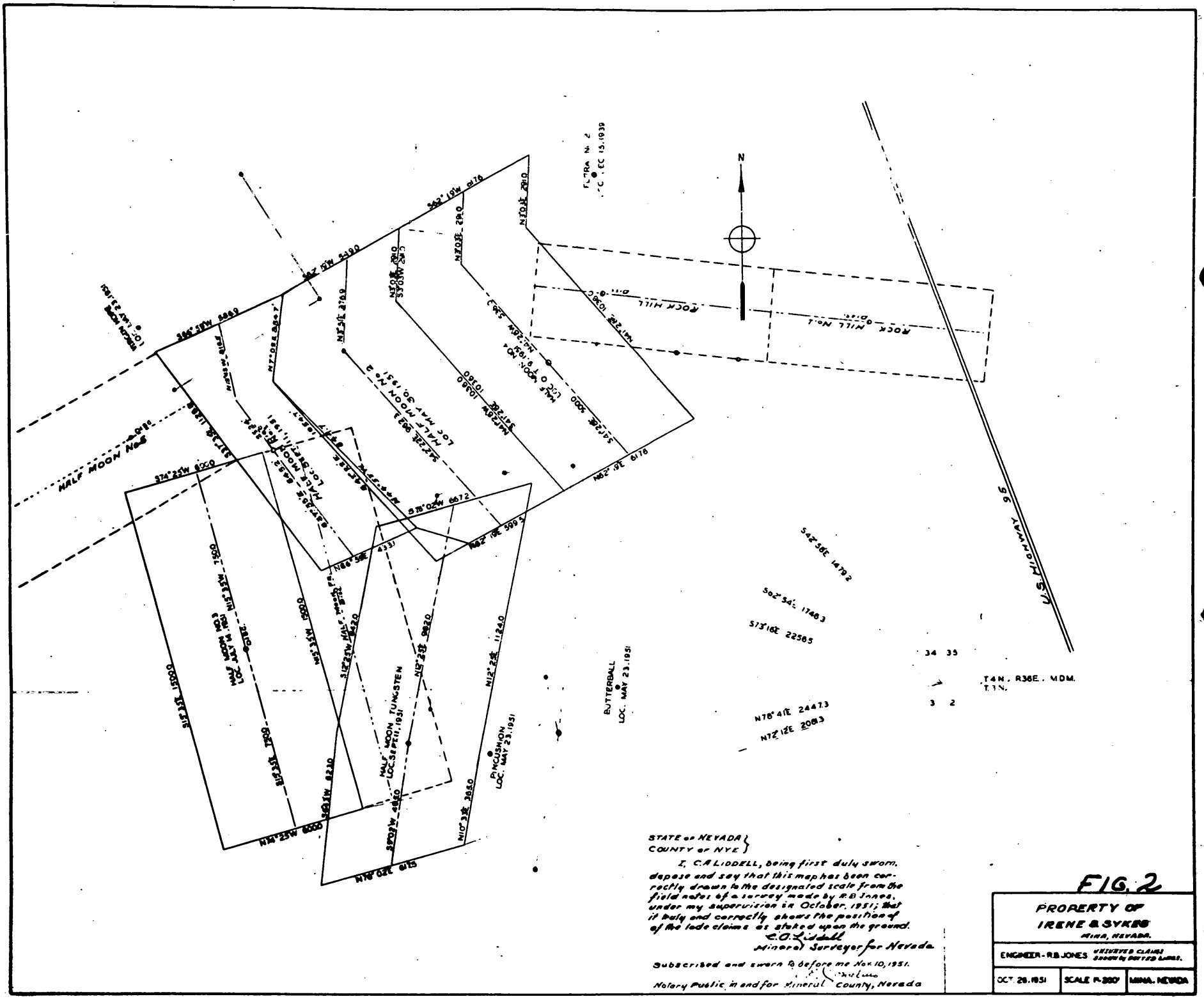


Fig. 1 Location Map



STATE of NEVADA }
COUNTY of NYE }

I, C.A. LIDDELL, being first duly sworn, depose and say that this map has been correctly drawn to the designated scale from the field notes of a survey made by R.B. Jones, under my supervision in October, 1951; that it truly and correctly shows the position of of the lode claims as staked upon the ground.

C.O. Liddell
Mineral Surveyor for Nevada

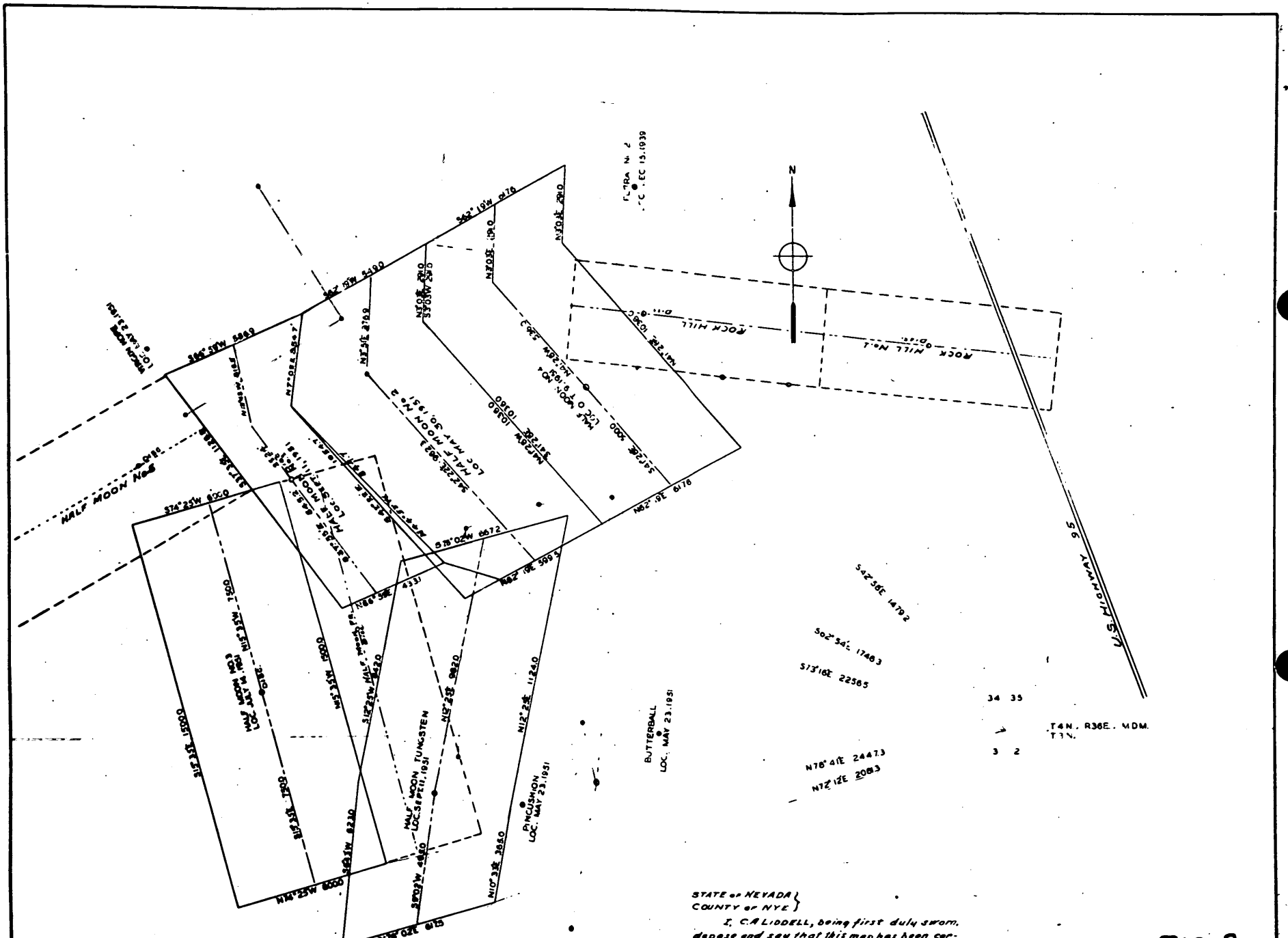
Subscribed and sworn to before me Nov. 10, 1951.

Notary Public in and for Mineral County, Nevada

FIG. 2

PROPERTY OF
IRENE & SYKES
MINA, NEVADA.

ENGINEER - R.B. JONES	VERIFIED CLAIMS SHOWN BY DOTTED LINES.	
OCT. 26, 1951	SCALE 1" = 200'	MINA, NEVADA



STATE OF NEVADA }
COUNTY OF NYE }

I, C.A. LIDDELL, being first duly sworn, depose and say that this map has been correctly drawn to the designated scale from the field notes of a survey made by R.B. Jones, under my supervision in October, 1951; that it truly and correctly shows the position of of the lode claims as staked upon the ground.

C.A. Liddell
Mineral Surveyor for Nevada

Subscribed and sworn to before me Nov. 10, 1951.

Notary Public in and for Mineral County, Nevada

FIG. 2

PROPERTY OF
IRENE & SYKES
MINA, NEVADA.

ENGINEER - R.B. JONES	UNSURVEYED CLAIMS SHOWN BY DOTTED LINES.	
OCT. 26.1951	SCALE 1" = 200'	MINA, NEVADA

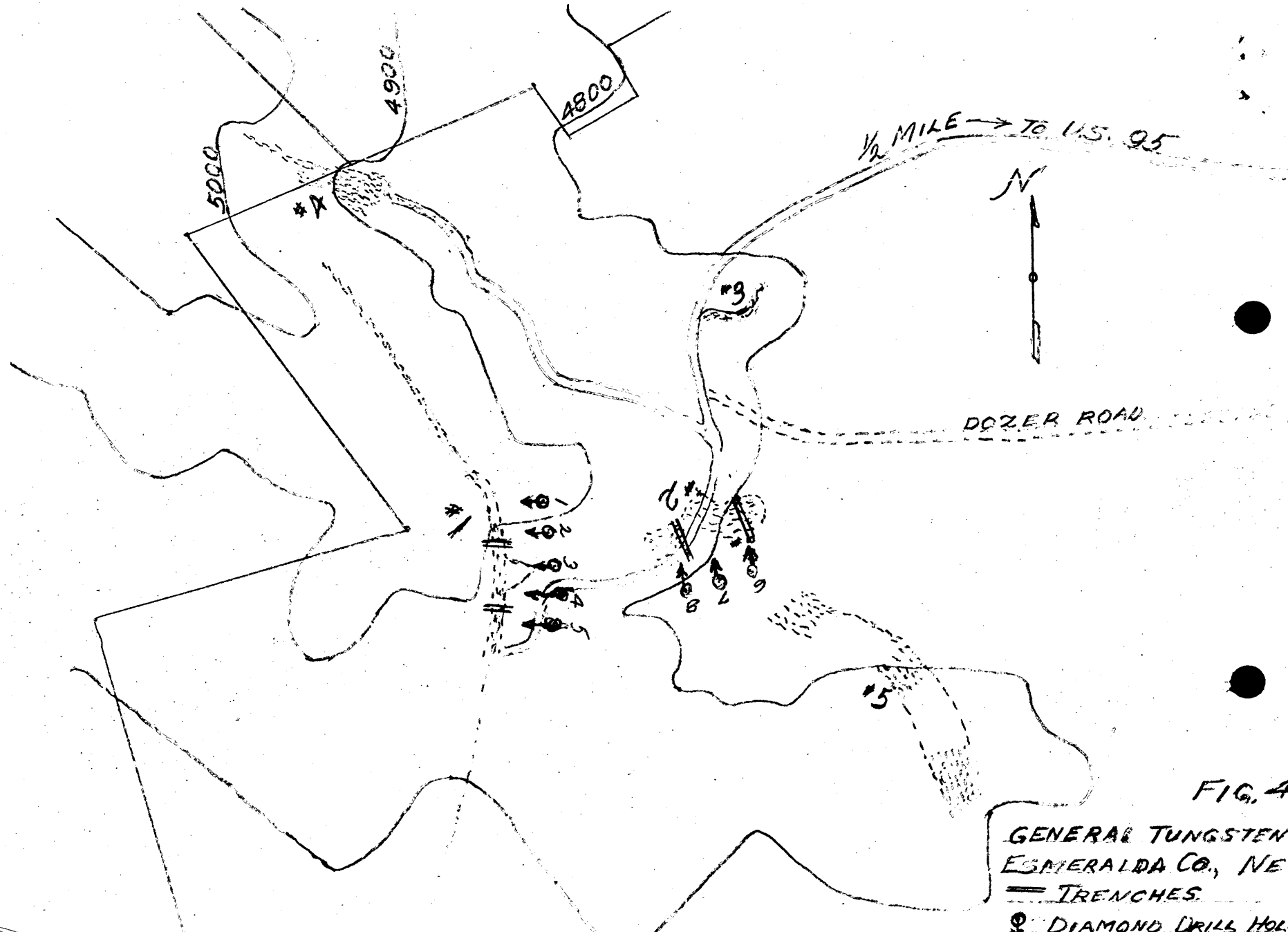


FIG. 4

GENERAL TUNGSTEN C
ESMERALDA CO., NEV.
═══ TRENCHES
DIAMOND DRILL HOLES
SCALE 1" = 200'
APRIL 28, 1952
DMEA 2381

#1, #2, #3, #4, #5 MINERALIZED OUTCROPS.
LOCATION OF DRILL HOLES ARE APPROXIMATE

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

DOCKET NO. DMEA 2361

COMMODITY Tungsten
Idaho

Extra Copy

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

EXPLORATION PROJECT CONTRACT[1]

IT IS AGREED this 3rd day of July, 1952, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and[2] Irene Sykes
Mina, Nevada

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 Esmeralda, described as follows:[3] 5 contiguous unpatented lode mining claims in Sections 34 and 35, T. 4 N., R. 36 E. and Section 3, T. 3 N., R. 36 E., Mount Diablo Meridian, recorded in the courthouse at Goldfield, Esmeralda County, Nevada, as indicated on the maps entitled Fig. 1--Location Map and Fig. 2--Property of Irene S. Sykes, and the Operator represents and undertakes:[4] Annex I attached hereto and made a part hereof.

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

None

(*b*) ~~That the Operator is a lessee in possession~~ ~~Current lease is attached~~

The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof.

ARTICLE 3. *Exploration project.*—The Operator, within Sixty (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 six (6) months from the date of this contract. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

ARTICLE 8. *Payments by the Government.*—(*a*) The Government will pay ---75--- percent of the allowable costs incurred, as they accrue, in an aggregate total amount not in excess of $---7,500.00---, which is ---15--- percent of $---10,000.00---, the agreed, estimated total cost of the project in which the Government will participate; *Provided,* that until the Operator's final report and final accounting have been rendered to the Government, and any final auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract.

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

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

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

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

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

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

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

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

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

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

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

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

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By O. Mitteudorf
Acting Administrator
Defense Minerals Exploration Administration

Irene Sykes
(Operator)

By _____

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

_____

[CORPORATE SEAL]

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

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(June 1951)
(Revised Feb. 1952)

DOCKET NO. DMEA 2381

COMMODITY Tungsten

Idm-E366
Docket Copy

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

EXPLORATION PROJECT CONTRACT[1]

IT IS AGREED this 3rd day of July, 1952, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and[2] The General Tungsten Company, a limited partnership between Ralph E. Thayson, Charles S. Thayson, Larry Lee Martin, and Irene Sykes (General Partner), c/o Mrs. Irene Sykes, Mina, Nevada.

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 Esmeralda, described as follows:[3] 3 contiguous unpatented lode mining claims in Sections 34 and 35, T. 4 N., R. 36 E. and Section 3, T. 3 N., R. 36 E., Mount Diablo Meridian, recorded in the courthouse at Goldfield, Esmeralda County, Nevada, as indicated on the maps entitled "Fig. 1--Location Map and Fig. 2--Property of Irene S. Sykes", and Annex I attached hereto and made a part hereof.

the Operator represents and undertakes:

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

None

Permitted

~~(*b*) That the Operator is in possession and entitled to possession and the Owner's Consent to Lien is attached.~~

The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof.

ARTICLE 3. *Exploration project.*—The Operator, within ~~thirty (30)~~ sixty (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 four (4) months from the date of this contract. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

ARTICLE 8. *Payments by the Government.*—(*a*) The Government will pay 75 percent of the allowable costs incurred, as they accrue, in an aggregate total amount not in excess of $7,950.00, which is 75 percent of $10,600.00, the agreed, estimated total cost of the project in which the Government will participate; *Provided,* that until the Operator's final report and final accounting have been rendered to the Government, and any final auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract.

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

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

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

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

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

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

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

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

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

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

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

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

Executed in sextuplicate the day and year first above written.

GENERAL TUNGSTEN COMPANY (a limited partnership)
(Operator)

Ralph E. Thompsonxxx Charles S. Payson

By

Harry Lee Martin Irene Sykes

THE UNITED STATES OF AMERICA

By

Acting Administrator
Defense Minerals Exploration Administration

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

[CORPORATE SEAL]

MF-206
(June 1951)
(Revised Feb. 1952)

DOCKET NO. DMEA 2381

COMMODITY Tungsten

Idm-E366

Field Team's Copy

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

EXPLORATION PROJECT CONTRACT[1]

IT IS AGREED this 3rd day of July, 1952, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and[2] The General Tungsten Company, a limited partnership between Ralph E. Thompson, Charles S. Payson, Larry Lee Martin, and Irene Sykes (general partner), c/o Mrs. Irene Sykes, Mina, Nevada.

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 Esmeralda, described as follows:[3] 9 contiguous unpatented lode mining claims in Sections 34 and 35, T. 4 N., R. 36 E. and Section 3, T. 3 N., R. 36 E., Mount Diablo Meridian, recorded in the courthouse at Goldfield, Esmeralda County, Nevada, as indicated on the maps entitled "Fig. 1--Location Map" and "Fig. 2--Property of Irene S. Sykes", and Annex I attached hereto and made a part hereof.

the Operator represents and undertakes:

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

None

(*b*) That the Operator is a lessee, in possession and entitled to possession, and the Owner's Consent to Lien is attached.

The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof.

ARTICLE 3. *Exploration project.*—The Operator, within ~~thirty (30)~~ sixty (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 four (4) months from the date of this contract. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

ARTICLE 8. *Payments by the Government.*—(*a*) The Government will pay 75 percent of the allowable costs incurred, as they accrue, in an aggregate total amount not in excess of $7,950.00, which is 75 percent of $10,600.00, the agreed, estimated total cost of the project in which the Government will participate; *Provided,* that until the Operator's final report and final accounting have been rendered to the Government, and any final auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract.

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

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

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

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

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

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

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

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

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

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

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

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

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

GENERAL TUNGSTEN COMPANY (a limited partnership)

(Operator)

Ralph E.Thompsxxxx   Charles S. Payson

By

Harry Lee Martin   Irene Sykes

By

Acting Administrator
Defense Minerals Exploration Administration

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

[CORPORATE SEAL]

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

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

DOCKET NO. DMEA 2361

COMMODITY Tungsten

Idm-E366

Division Copy

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

EXPLORATION PROJECT CONTRACT [1]

IT IS AGREED this 3rd day of July, 1952, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and [2] The General Tungsten Company, a limited partnership between Ralph E. Thompson, Charles S. Payson, Harry Lee Martin, and Irene Sykes (general partner), c/o Mrs. Irene Sykes, Alma, Nevada.

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 Esmeralda, described as follows: [3] 9 contiguous unpatented lode mining claims in Sections 34 and 35, T. 4 N., R. 36 E. and Section 3, T. 3 N., R. 36 E., Mount Diablo Meridian, recorded in the courthouse at Goldfield, Esmeralda County, Nevada, as indicated on the map entitled Fig. 1--Location Map and Fig. 2--Property of Irene S. Sykes, and Annex I attached hereto and made a part hereof.

the Operator represents and undertakes:

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

None

(*b*) That the Operator is a lessee in possession and entitled to possession, and the Owner's Consent to Lien is attached.

The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof.

ARTICLE 3. *Exploration project.*—The Operator, within ~~thirty (30)~~ sixty (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 four (4) months from the date of this contract. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

ARTICLE 8. *Payments by the Government.*—(*a*) The Government will pay 75 percent of the allowable costs incurred, as they accrue, in an aggregate total amount not in excess of $7,550.00, which is 75 percent of $10,0[illegible].00, the agreed, estimated total cost of the project in which the Government will participate; *Provided,* that until the Operator's final report and final accounting have been rendered to the Government, and any final auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract.

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

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

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

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

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

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

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

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

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

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

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

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

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

ENERAL TUNGSTEN COMPANY (a limited partnership)

(Operator)

lph E. Thompsxxxx Charles S. Payson

By [signature]

Harry Lee Martin Irene Sykes

By [signature]

Acting Administrator
Defense Minerals Exploration Administration

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

[CORPORATE SEAL]

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

MF-500
(June 1951)
(Revised Feb. 1952)

DOCKET NO. DMEA 2381

COMMODITY Tungsten
Idm-E366
Finance Office's Copy

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

EXPLORATION PROJECT CONTRACT[1]

IT IS AGREED this 3rd day of July, 1952, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and[2] The General Tungsten Company, a limited partnership between Ralph E. Thompson, Charles S. Payson, Harry Lee Martin, and Irene Sykes (general partner), c/o Mrs. Irene Sykes, Mina, Nevada.

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 Esmeralda, described as follows:[3] 9 contiguous unpatented lode mining claims in Sections 34 and 35, T. 4 N., R. 36 E. and Section 3, T. 3 N., R. 36 E., Mount Diablo Meridian, recorded in the courthouse at Goldfield, Esmeralda County, Nevada, as indicated on the maps entitled "Fig. 1--Location Map" and "Fig. 2--Property of Irene S. Sykes", and Annex I attached hereto and made a part hereof.

the Operator represents and undertakes:

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

None

(*b*) That the Operator is a lessee, in possession and entitled to possession, and the Owner's Consent to Lien is attached.

The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof.

ARTICLE 3. *Exploration project.*—The Operator, within ~~thirty (30)~~ sixty (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 four (4) months from the date of this contract. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

ARTICLE 8. *Payments by the Government.*—(*a*) The Government will pay 75 percent of the allowable costs incurred, as they accrue, in an aggregate total amount not in excess of $7,950.00, which is 75 percent of $10,600.00, the agreed, estimated total cost of the project in which the Government will participate; *Provided,* that until the Operator's final report and final accounting have been rendered to the Government, and any final auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract.

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

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

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

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

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

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

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

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

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

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

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

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

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C A Mitteudorf
Acting Administrator
Defense Minerals Exploration Administration

GENERAL TUNGSTEN COMPANY (a limited partnership)

(Operator)

Ralph E. Thompson Charles S. Payson

By Henry Lee Martin

Henry Lee Martin Irene Sykes

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

[CORPORATE SEAL]

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

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(June 1951)
(Revised Feb. 1952)

DOCKET NO. DMEA 2381

COMMODITY Tungsten
Idm-E366
Operator's Copy

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

EXPLORATION PROJECT CONTRACT[1]

IT IS AGREED this 3rd day of July, 1952, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and[2] The General Tungsten Company, a limited partnership between Ralph E. Thompson, Charles S. Payson, Harry Lee Martin, and Irene Sykes (general partner), c/o Mrs. Irene Sykes, Mina, Nevada.

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 Esmeralda, described as follows:[3] 9 contiguous unpatented lode mining claims in Sections 34 and 35, T. 4 N., R. 36 E. and Section 3, T. 3 N., R. 36 E., Mount Diablo Meridian, recorded in the courthouse at Goldfield, Esmeralda County, Nevada, as indicated on the maps entitled "Fig. 1--Location Map" and "Fig. 2--Property of Irene S. Sykes", and Annex I attached hereto and made a part hereof

the Operator represents and undertakes:[4]

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

None

~~(b) That the Operator, [illegible] the Owner's Consent to Lien is attached.~~

The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof.

ARTICLE 3. *Exploration project.*—The Operator, within ~~thirty (30)~~ sixty (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 four (4) months from the date of this contract. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

ARTICLE 8. *Payments by the Government.*—(*a*) The Government will pay 75 percent of the allowable costs incurred, as they accrue, in an aggregate total amount not in excess of $7,950.00, which is 75 percent of $10,600.00, the agreed, estimated total cost of the project in which the Government will participate; *Provided,* that until the Operator's final report and final accounting have been rendered to the Government, and any final auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract.

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

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

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

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

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

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

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

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

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

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

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

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

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

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

GENERAL TUNGSTEN COMPANY (a limited partnership)

(Operator)

Ralph E. Thompson

Charles S. Payson

By Harry Lee Martin

Irene Sykes

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

[CORPORATE SEAL]

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

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

DOCKET NO. DMEA 2381

COMMODITY Tungsten
Idm-E366
Government's Copy

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

EXPLORATION PROJECT CONTRACT [1]

IT IS AGREED this 3rd day of July, 1952, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and [2] The General Tungsten Company, a limited partnership between Ralph E. Thompson, Charles S. Payson, Harry Lee Martin, and Irene Sykes (general partner), c/o Mrs. Irene Sykes, Mina, Nevada.

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 Esmeralda, described as follows: [3] 9 contiguous unpatented lode mining claims in Sections 34 and 35, T. 4 N., R. 36 E. and Section 3, T. 3 N., R. 36 E., Mount Diablo Meridian, recorded in the courthouse at Goldfield, Esmeralda County, Nevada, as indicated on the maps entitled "Fig. 1--Location Map" and "Fig. 2--Property of Irene S. Sykes", and Annex I attached hereto and made a part hereof, the Operator represents and undertakes: [4]

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

None

~~XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX attached.~~

The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof.

ARTICLE 3. *Exploration project.*—The Operator, within sixty (60) ~~thirty (30)~~ new 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 four (4) months from the date of this contract. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

ARTICLE 8. *Payments by the Government.*—(*a*) The Government will pay 75 percent of the allowable costs incurred, as they accrue, in an aggregate total amount not in excess of $7,950.00, which is 75 percent of $10,600.00, the agreed, estimated total cost of the project in which the Government will participate; *Provided,* that until the Operator's final report and final accounting have been rendered to the Government, and any final auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract.

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

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

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

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

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

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

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

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

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

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

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

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

Executed in sextuplicate the day and year first above written.

GENERAL TUNGSTEN COMPANY (a limited partnership)

Ralph E. Thompsxxxxx   Charles S. Payson

By Harry Lee Martin   Irene ~~Sykes~~

THE UNITED STATES OF AMERICA

By

Acting Administrator
Defense Minerals Exploration Administration

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

[CORPORATE SEAL]

DMA Form 1

DEFENSE MINERALS ADMINISTRATION
Control Slip

CONTROLLED DOCUMENT

DMEA ~~DMA~~ Docket No. 2381

DO NOT DETACH THIS SLIP

Action on this document is recorded and controlled in Reports and Records Branch. Any movement of this document between divisions or offices of DMA or movement outside DMA must be reported to the Reports and Records Branch. Actions taken that affect status of the case must also be reported.

This document has been recorded as

EXPLORATION PROJECT

Any action taken to change the type of request for assistance must be promptly reported to the Reports and Records Branch. Use DMA Form 2 for submitting these reports.

Routing Slip IN REGION III
ONE SET SENT TO USBM, USGS & ONE RETAINED/

To:	CODE 400, RM. 3538	Date	2-19-52
To:	Operating Com.	Date	2-27-52
To:	Operating Com.	Date	3-12-52
To:	Op. Com	Date	6-27-52
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	

DO NOT DETACH

CONTROLLED DOCUMENT

FILE COPY
SURNAME:

400

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

Rutledge
Hopkins
Keating
Talbot
DeKane
Rubin

JUN 8 1953

Mrs. Irene Sykes
1239 S. Beverly Glen Boulevard
Los Angeles 24, California

Re: Docket No. DMEA 2381 - Tungsten
Irene Sykes
Rock Hill property
Esmeralda County, Nevada
Contract No. Idm-E366

Dear Mrs. Sykes:

This is with reference to the subject Exploration Contract between you and the Government.

The final audit of the contract expenditures and the final reports of the Operator and of the Field Team have been received and accepted by this Administration. Of the total amount of $6,760.00 approved under Stage I of the contract (total contract $10,600.00), the sum of $5,040.51 was expended, 75 percent of which, or $3,780.38, represented the Government's share. There were no unused materials, supplies, or equipment to be disposed of for the joint account of the Operator and the Government.

The exploration work was not carried out in a competent manner. The contract was terminated by agreement January 14, 1953.

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 7 (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.

FARutledge:fo
6-5-53

cc: Docket
Code 400
FT. REG.III
Adm. Read. File

cc: Oper. Comm.
R.W. Geehan, USBM
D.M. Lemmon, USGS

Sincerely yours,

C. O. Mittendorf

Administrator

6-8-53

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

June 5, 1953

MEMORANDUM

To: Administrator, DMEA

From: Iron and Ferro-Alloys Division, DMEA

Subject: Memorandum of Non-Discovery
Docket No. DMEA 2381 - Tungsten
Irene Sykes
Rock Hill property
Esmeralda County, Nevada
Contract No. Idm-E366

This Division hereby concludes that the work done upon the subject property, as described under Stage I 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 known as the Rock Hill tungsten mine and consists of nine continguous unpatented lode mining claims in Sec. 34, T. 4 N., R. 36 E., M.D.B. & M. The property is located approximately 20.6 miles south of Mina, Nevada.

2. The commodity sought was tungsten which occurs mainly as scheelite, but with very minor hubnerite, disseminated in tactite. The tactite has been formed by the metamorphism of a series of interbedded sandstone, limy slate, and impure limestone and dolomite. Quartz veins are numerous and are believed to be genetically related to the granitic intrusion that is responsible for the formation of the tactite. The quartz veins contain little or no tungsten, but near their intersections with favorable beds, the surrounding rock contains a small amount of scheelite. The mineralized tactite is hard and dark green in color.

3. A two-stage exploration program was approved under the above-referenced contract. Stage I consisted of two trenches and 5 diamond drill holes not to aggregate in excess of 640 feet. Stage II consisted of two additional trenches and 3 diamond drill holes totaling 385 feet.

4. The first stage of the exploration work was not completed and the exploration work was not carried out in a satisfactory manner. Core and sludge recoveries were poor and the reports submitted by the Operator did not show the amount or location of the surface trenching. Samples taken by the Operator were not representative of the material that could be mined.

5. Although the objectives of the exploration work were not reached, the preliminary information obtained indicated that the second stage of the program was not warranted. No ore reserves were apparent. The mineralized areas are either too low grade or too small to constitute workable ore deposits.

6. The contract was terminated by mutual agreement January 14, 1953.

7. The Government disbursed, as its share of the expenditures, $3,780.38. Total expenditures were $5,040.51. There were no unused materials, supplies, or equipment to be disposed of for the joint account of the Operator and the Government.

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

FILE COPY
SURNAME:

400

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.
June 5, 1953

Rutledge
Hoyt
Martin
Talbert

MEMORANDUM

To: Administrator, DMEA

From: Iron and Ferro-Alloys Division, DMEA

Subject: Memorandum of Non-Discovery
Docket No. DMEA 2381 - Tungsten
Irene Sykes
Rock Hill property
Esmeralda County, Nevada
Contract No. Idm-E366

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

FARutledge:foc
6-5-53

cc: Docket
Code 400
Adm. Reading File
Operating Comm.

400

JUN 8 1953

Mrs. Irene Sykes
1239 S. Beverly Glen Boulevard
Los Angeles 24, California

Re: Docket No. DMEA 2381 - Tungsten
Irene Sykes
Rock Hill property
Esmeralda County, Nevada
Contract No. Idm-3366

Dear Mrs. Sykes:

This is with reference to the subject Exploration Contract between you and the Government.

The final audit of the contract expenditures and the final reports of the Operator and of the Field Team have been received and accepted by this Administration. Of the total amount of $6,760.00 approved under Stage I of the contract (total contract $10,600.00), the sum of $5,040.51 was expended, 75 percent of which, or $3,780.38, represented the Government's share. There were no unused materials, supplies, or equipment to be disposed of for the joint account of the Operator and the Government.

The exploration work was not carried out in a competent manner. The contract was terminated by agreement January 14, 1953.

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

Sincerely yours,

C. O. Mittendorf

Administrator

FAButledge:foo
6-5-53
cc: Docket cc: Oper. Comm.
Code 400 R.W. Geehan, USBM
FT. REG. III D.M. Lemmon, USGS
Adm. Read. File

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

COPY

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

May 13, 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-2381 (Tungsten)
Irene Sykes Property, Esmeralda County, Nevada
Contract Idm-E366

Reference is made to your subject letter dated April 27, 1953, requesting me to take appropriate action regarding the disposition of one mineral light supposedly purchased by Mrs. Sykes under the above cited contract so you may close your file on her operations.

In reply to my letter to Mrs. Sykes, dated April 30, 1953, a carbon copy of which was sent to DMEA, Mrs. Sykes by letter (undated) received in this office on May 5, informs me that Mr. Sheahan was mistaken when he reported that one mineral light having a salvage value of $40 remained to be disposed of. She wrote that at the time of signing the contract she owned eight mineral lights and that the day Mr. Sheahan visited the property she left two lamps with the drillers who locked them in the tool shed when they left. The tool shed was later broken into and both lamps stolen. The item of $56 claimed by Mrs. Sykes was for repairs to one of the lamps - a replacement of a battery and the repair of a broken filter. That is what she reported on her MF-104 form and not the purchase of a lamp. This repair and replacement item, she wrote, can be verified by taking the matter up with the Black Lite Company, 7354 Santa Monica Boulevard, Los Angeles, from which firm, she wrote, she never purchased a lamp.

The eight lamps she owned were purchased from the Ultra Violet Products Company, South Pasadena, which firm, she wrote, will verify the purchases and the dates.

In view of the apparent fact that there was no mineral light purchased under the contract, I am today, in accordance with

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

DMEA Memorandum 30, Supplement No. 1, Item 2, issuing a waiver of the Government's interest in all property purchased under the contract. The original and two copies of the waiver are enclosed; the other three copies are being distributed to the usual parties, of which Mrs. Sykes is one.

Accordingly, the books on this contract may now be closed.

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

Attachment

Copy to: Finance Officer, Region III
A. C. Johnson, Reno
E. H. Bailey, USGS
George Mavor

Docket Copy

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

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

To: Mrs. Irene Sykes
1239 So. Beverly Glen Boulevard
Los Angeles 24, California

Operator under Exploration Project
Contract Idm-X546, Docket No.
DMEA-2381, dated July 3, 1952.

The United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, under the terms of the above described contract, hereby waives its interest in all property acquired under that contract.

Dated May 13, 1953

THE UNITED STATES OF AMERICA

By H. C. Miller

H. C. Miller

Executive Officer,
DMEA Field Team, Region III
Title

Copy to: Operating Committee, DMEA, Washington (3)
Finance Officer, Region III
A. C. Johnson, Reno
E. H. Bailey, USGS
George Mavor

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

MAY 18 1953

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

May 13, 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-2381 (Tungsten)
Irene Sykes Property, Esmeralda County, Nevada
Contract Idm-E366

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Accordingly, the books on this contract may now be closed.

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

Attachment

Copy to: Finance Officer, Region III
A. C. Johnson, Reno
E. H. Bailey, USGS
George Mavor

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

May 13, 1953

Mrs. Irene Sykes
1239 So. Beverly Glen Boulevard
Los Angeles 24, California

Re: Docket DMEA-2381 (Tungsten)
Irene Sykes Property
Esmeralda County, Nevada
Contract Idm-E366

Dear Mrs. Sykes:

I was glad to get your undated letter received in this office on May 5, in reply to my letter to you dated April 30, 1953, concerning one mineral light erroneously reported as having been purchased under the above captioned contract. We regret that this matter came up as when Mr. Mavor returned to San Francisco yesterday we found that what you claimed on your MF-104 was not reimbursement for a mineral light but rather a battery and repair to a filter. Accordingly, I am today preparing a waiver of the Government's interest in all property acquired under the contract. Your copy of the waiver is attached.

Sincerely yours,

H. C. MILLER

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

Attachment

Copy to: DMEA, Washington, D. C.
E. H. Bailey, USGS
A. C. Johnson, Reno

HCMiller:mpp
Files
Chron.

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

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

April 30, 1953

Mrs. Irene Sykes
1239 S. Beverly Glen Boulevard
Los Angeles 24, California

Re: Docket DMEA-2381 (Tungsten)
Irene Sykes Property
Esmeralda County, Nevada
Contract Idm-E366

Dear Mrs. Sykes:

The Washington Office of the Defense Minerals Exploration Administration has notified this office that to date we have issued no official waiver of the Government's interest in property acquired under the above-captioned contract. This should have been done sometime ago, but for one reason or another I never got at it.

Operating under your contract, you purchased a mineral light with battery and filter at a cost of $56.00. Mr. B. H. Sheahan, in his final report on your operation, dated March 6, 1953, reported that the light had a salvage value of $40.00 and recommended that the Operator (you) should purchase this item.

Under the terms of your contract, it was your duty to make the best possible disposition of property in which the Government had an equity, for the benefit of the Government. Every effort should have been made to sell the property at a price higher than you are willing to pay.

Will you kindly let us know what efforts you made to dispose of the mineral light and the offers that were made for it. Also, let us know what you are willing to pay for it.

Sincerely yours,

H. C. MILLER

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

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

D. M. E. A

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

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

Department of the Interior
Defense Minerals Administration
RECEIVED
MAY 4 1953

April 27, 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-2381 (Tungsten)
Irene Sykes, Rock Hill Property, Esmeralda County, Nevada
Contract Idm-E366

Supplementing our memorandum of April 8, the missing documents in connection with the Operator's final report on the subject contract have now been received through our Reno Office. As one of the four copies of the Operator's final report was not complete when forwarded to you on April 8, we have enclosed herewith one complete copy of the report, together with three copies of survey chart by C. A. Liddell, which are to be added to the three copies of the report now in your office.

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

Attachments

Copy to: E. H. Bailey, USGS

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

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 4 1953

April 27, 1953

Memorandum

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From: Executive Officer, DMEA Field Team, Region III

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H. C. MILLER

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

Attachments

Copy to: E. H. Bailey, USGS

ESTABLISHED 1916

EISENHAUER LABORATORIES

ENGINEERING DIVISION
316 SOUTH SAN PEDRO STREET
LOS ANGELES 13, CALIFORNIA

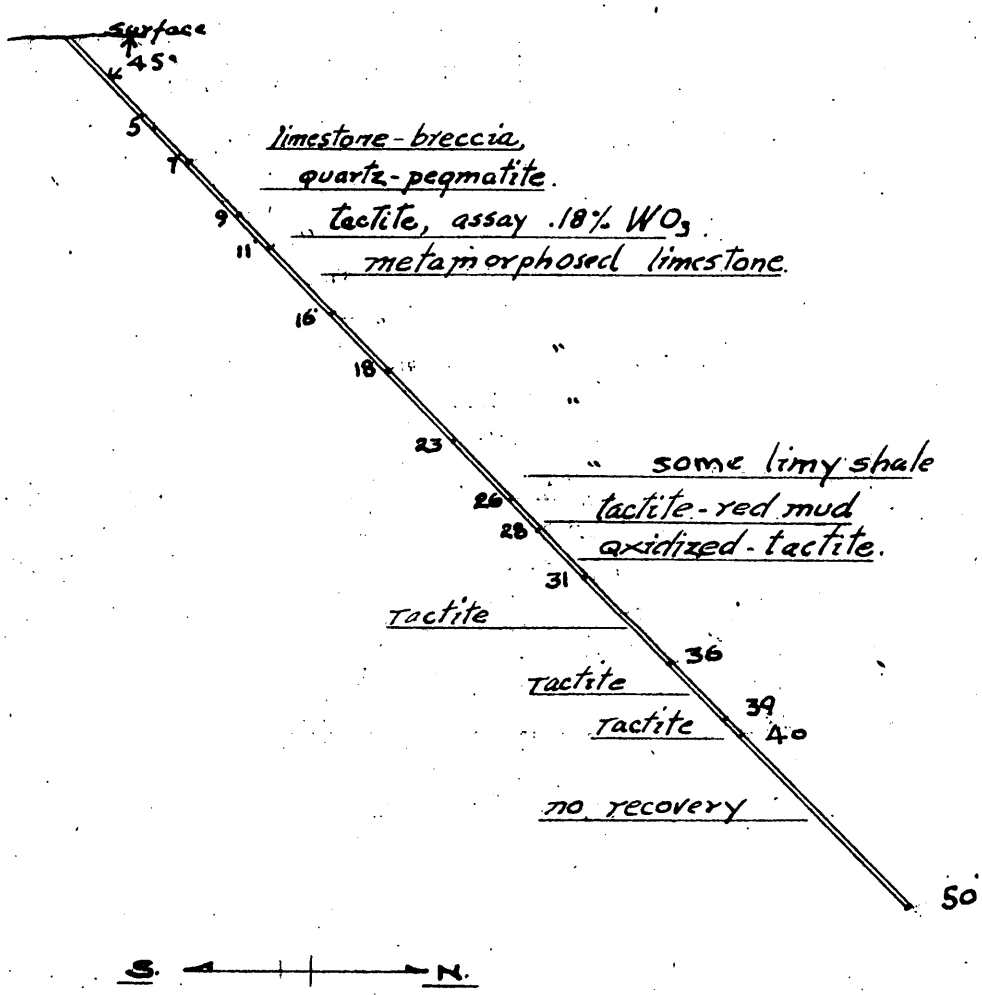
ED. EISENHAUER, JR.
L. C. PENHOEL

PHONE: VANDIKE 9328

FILE NO. 163.

Irene S. Sykes,
IDME. 366.

LEGEND.			
FOOTAGE	DIAM. CORE	% CORE	WO_3* LESS .1% ✓
3'-7'	1-1/16"	75	✓
7'-9'	"	75	✓
9'-11'	"	30	.18
11'-16'	"	90	✓
16'-18'	1-3/16"	25	✓
18-23'	"	50	✓
23-26'	"	85	✓
26'-28'	"	10	✓
28'-31'	"	30	✓
31'-36'	"	50	✓
36-39'	"	80	✓
39-40'	"	40	✓
40'-50'	"	—	✓



D. D. HOLE 1-A.

L. C. Penhoel
1/9/53.

ESTABLISHED 1916

EISENHAUER LABORATORIES

ENGINEERING DIVISION
316 SOUTH SAN PEDRO STREET
LOS ANGELES 13, CALIFORNIA

ED. EISENHAUER, JR.
L. C. PENHOEL

PHONE: VANDIKE 9328

FILE NO. 163.

Irene S. Sykes
I. D. M.E. 366.

LEGEND			
FOOT-AGE.	CORE DIAM.	% CORE	DESCRIPTION
1-5	1¾"	75	SILICIFIED LIMESTON BRECCIA
5-6	"	50	TACTITE - OXIDIZED.
6-7	"	—	" "
7-11	"	60	METAMORPHOSED SCHIST
11-14	"	40	SILICIFIED LIMESTONE
14-15	"	60	SLATE
15-17	"	30	ALTERED LIMESTONE
17-19	"	30	" "
19-21	"	90	LIME SHALE
21-26	1⅛"	5	OXIDIZED LIME SHALE
26-28	"	50	SILICEOUS "
28-30	"	25	SLATE
30-31	"	40	"
31-35	"	5	" QUARTZ STRINGERS
35-36	"	50	SLATE
36-38	"	45	"
38-40	"	45	"
40-44	"	—	
44-49	"	5	SLATE
49-55	"	—	
55-61	"	30	SLATE

LEGEND			
FOOT-AGE	CORE DIAM.	% CORE	DESCRIPTION
61-66	1⅛"	10	SLATE
66-71	"	25	"
71-76	"	15	"
76-83	"	4	"
83-90	"	4	"
90-97	"	4	"
97-103	"	10	LIME SCHIST
103-108	"	5	" "
108-128	"	—	
128-132	"	10	SLATE
132-140	"	10	" QUARTZ SEAM
140-155	"	10	" ALTERED LIMESTONE
155-160	"	10	" " "
			NO WO_3 PLUS .1% TO 160'.
			SLUDGE 142-147 REACTED
			FOR LIMESTONE AND PAN-
			NED CONSIDERABLE IRON
			PYRITE.
			SLUDGE, -160, SAME AS
			ABOVE.

D.D. HOLE 2.

DIP 45°, BEARING S 10° E, DEPTH 160'.

L. C. Penhoel
1/9/53.

ESTABLISHED 1916

EISENHAUER LABORATORIES

ENGINEERING DIVISION
316 SOUTH SAN PEDRO STREET
LOS ANGELES 13, CALIFORNIA

ED. EISENHAUER, JR.
L. C. PENHOEL

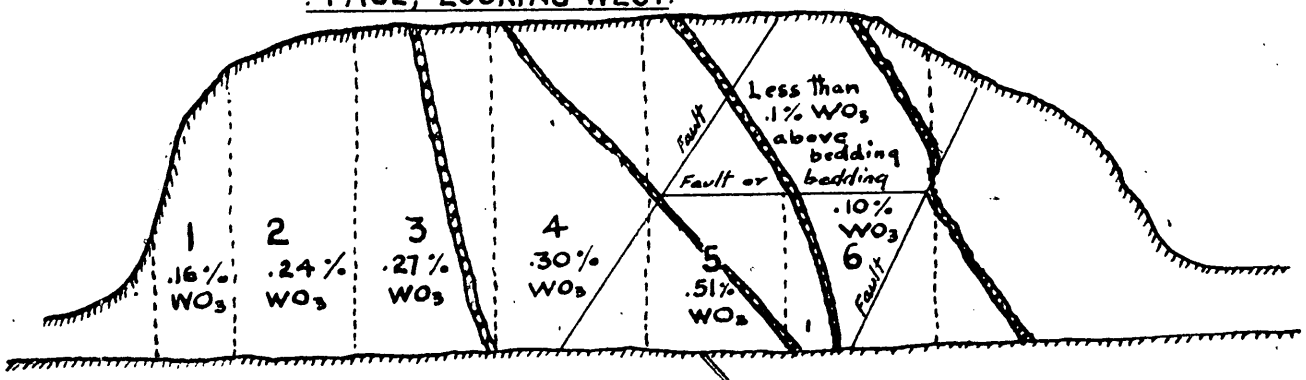
PHONE: VANDIKE 9328

FILE NO. 163.

Irene S. Sykes.
I.D.M.E. 366.

Assay Map - Cut No. 2.

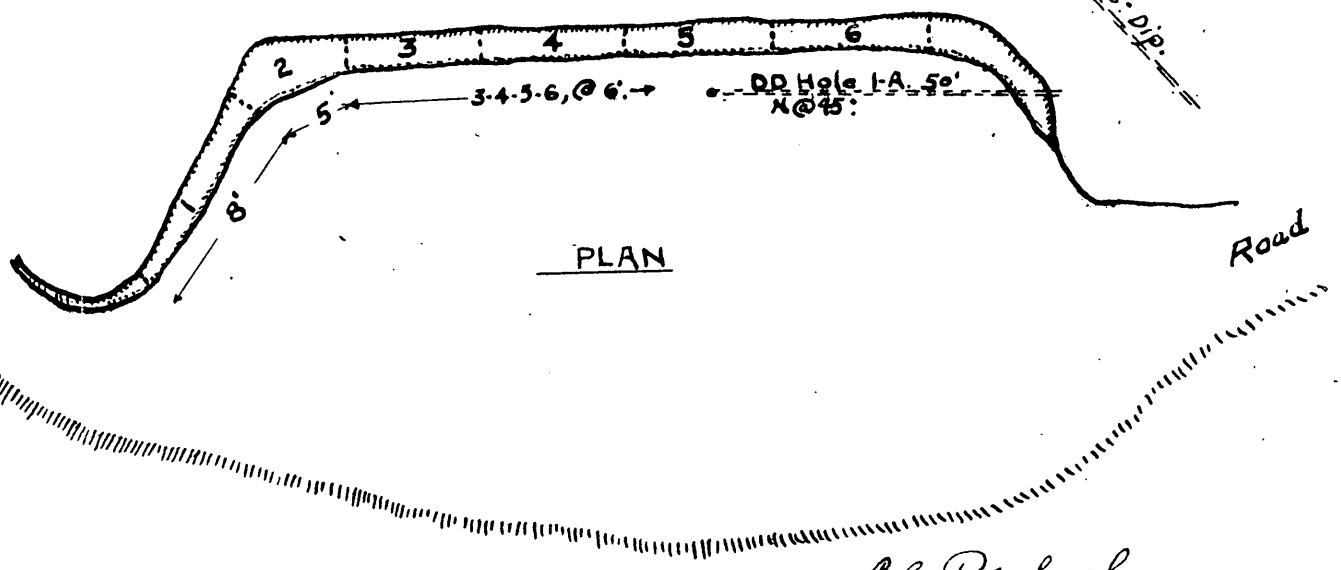
FACE, LOOKING WEST.



Sample #1.- ht. 8' - W 8', soft weathered Lms.
2- " 8' - " 5', gray Lms - tactite.
3- " 8' " 6', " " "
4- " 7' " 6', iron stained weathered tactite - high grade seam at bottom.
5- " 5' " 6' tactite.
6- " 5' " 6' limy slate, some tactite.
Quartz-pegmatite veins.

2' tactite, assay .18% WO3

DD Hole 1A 50' Bearing N@45° Dip.



PLAN

L. C. Penhoel
1/9/53

ESTABLISHED 1916

EISENHAUER LABORATORIES

ENGINEERING DIVISION
316 SOUTH SAN PEDRO STREET
LOS ANGELES 13, CALIFORNIA

ED. EISENHAUER, JR.
L. C. PENHOEL

PHONE: VANDIKE 9328

January 9, 1953.

FILE NO.103.

Irene S. Sykes,
1239 South Beverly Glen Blvd.,
Los Angeles 24, California.

Account; Rock Hill Tungsten Property,
Esmeralda County, Nevada.

Progress Report, IDME 366.
November-December 1952 and January 1953.

Foreword;

The field work as owner's engineer in the IDME 366 diamond drill program, started on December 2,1952 at which time hole 1-A was completed and drilling hole 2 was in progress.

On December 5, Mr. C.A.Liddell, the retiring owner's engineer, was confered with at the property.

Mr. Liddell turned over maps and verbally reviewed information obtained by engineers of the Bureau of Mines and himself upon which the drilling program to drill 6 holes, with a total footage of 1000 feet, was recommended.

With the exception of hole 1-A, the holes are plotted as shown on Plate NO.1 of Mr. Liddell's survey,print of which is attached.

All of the holes with the exception of hole 1-A, are of the nature of crosscuts to intersect the downward projection of possible ore.

On December 4 surface areas were gone over, both during the day and after dark with a violet-ray lamp.

On December 5, samples were taken from areas where work had been done and exposures indicated that ore might be developed. Six of these samples were taken from Cut NO.2 and one from Cut NO.1.

Due to stormy weather the work was done under difficulty and on the afternoon of December 5, weather conditions became so bad that it was decided to return to Los Angeles with the core of the first 35 feet from hole 2, arrange for core and sludge boxes and return prepared to take up residence and record the work and results of drilling.

On December 9, before arrangements were completed to return to the property, the contractor reported that in hole 3 it was impossible to obtain a satisfactory core or sludge sample.

ESTABLISHED 1916

EISENHAUER LABORATORIES
ENGINEERING DIVISION
316 SOUTH SAN PEDRO STREET
LOS ANGELES 13, CALIFORNIA

ED. EISENHAUER, JR.
L. C. PENHOEL

PHONE: VANDIKE 9328

January 9, 1957.

FILE NO.163.

Under the conditions that one or more of the remaining holes would probably be in shattered ground and with a difference of opinion, that ~~that~~ the results from the drilling, even if completed, would justify the expenditure, it was recommended that Mr. Johnson of the Reno office be notified. The result was that Mr. Sheean was sent to the property and he agreed, that every thing considered, the contractor should be excused for noncompliance for reasons beyond his controland the contractor waiving any claim except for the completed footage drilled, moved his rig off the property on Dec. 15.

Core and sludge samples and the driller's log of hole 3, are being sent direct to the Reno office.

Summary;

The immediate area within which the drill holes have been located is principally made up of metamorphosed limestone with much folding and some faulting.

Local areas show brecciated white lime in dense blue silicified limestone. In shattered areas impure limestones weather to dust. Other areas have been altered to tactite.

Scheelite at times occurs in the quartz-pegmatite veins and in the hard siliceous blue limestone adjacent to the walls of the quartz veins for one or more feet. The more prominent occurrence of scheelite is in the tactite rock

The quartz veins are numerous, often only a few feet apart. Their general strike is east and west with dips at high angles to the north. Widths, where viewed, are rarely more than 8 to 12 inches wide. They represent the more fluid constituent of pegmatite dikes and probably were the channels from the granite for the scheelite mineral solutions.

From evidence shown by rock in the dump from the "old shaft", reported to be 200 feet deep, there is a bed of micaceous schist, of unknown thickness, between the granite and the limestone.

This schist shows little or no scheelite and it is probable that there was no deposition of scheelite until the solutions reached and passed into the limestones.

It is probable that more important concentrations of scheelite exist closer to the contact of the limestone and schist or if the schist is absent, closer to the contact with the granite. That is; more scheelite, all other favorable conditions being equal, would be depositid from the mineral

ESTABLISHED 1916

EISENHAUER LABORATORIES

ENGINEERING DIVISION
316 SOUTH SAN PEDRO STREET
LOS ANGELES 13, CALIFORNIA

ED. EISENHAUER, JR.
L. C. PENHOEL

PHONE: VANDIKE 9328

January [illegible], 195[illegible].

FILE NO.10[illegible].

bearing quartz-pegmatite channels close to the contact than at distances until until finally the solutions are barren of mineral.

Recommendations;

It is recommended that exposure of scheelite in present trenches or pits be studied and with additional trenching, if deemed necessary, select a place that would permit a limited amount of prospecting in the nature of test pits or shaftwork on the ore.

With compressor and tools on the property the funds left from the uncompleted diamond drill program could be used to advantage to conclude if more extensive exploration work is justified.

Attached to this report are the following papers;

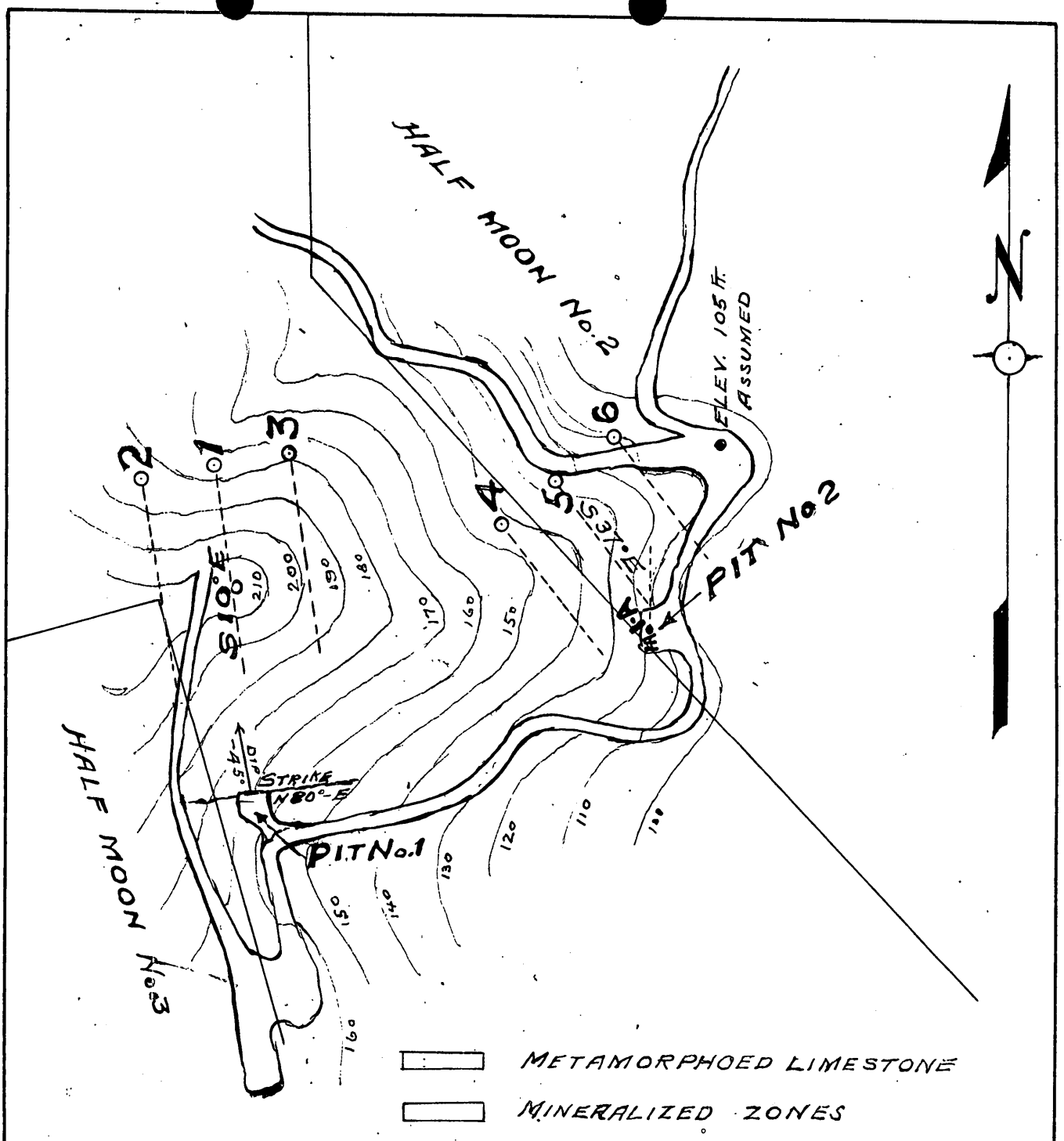
(1) C.A.Liddell survey with DD holes NO's 1[illegible] and [illegible] plotted; with the approximate location of hole 1-[illegible] plotted later.

(2) Diagramatic log of hole 1[illegible] and hole [illegible].

(3) Sketch, Assay Map showing location and description with WO_3 content of samples taken December 5, 195[illegible].

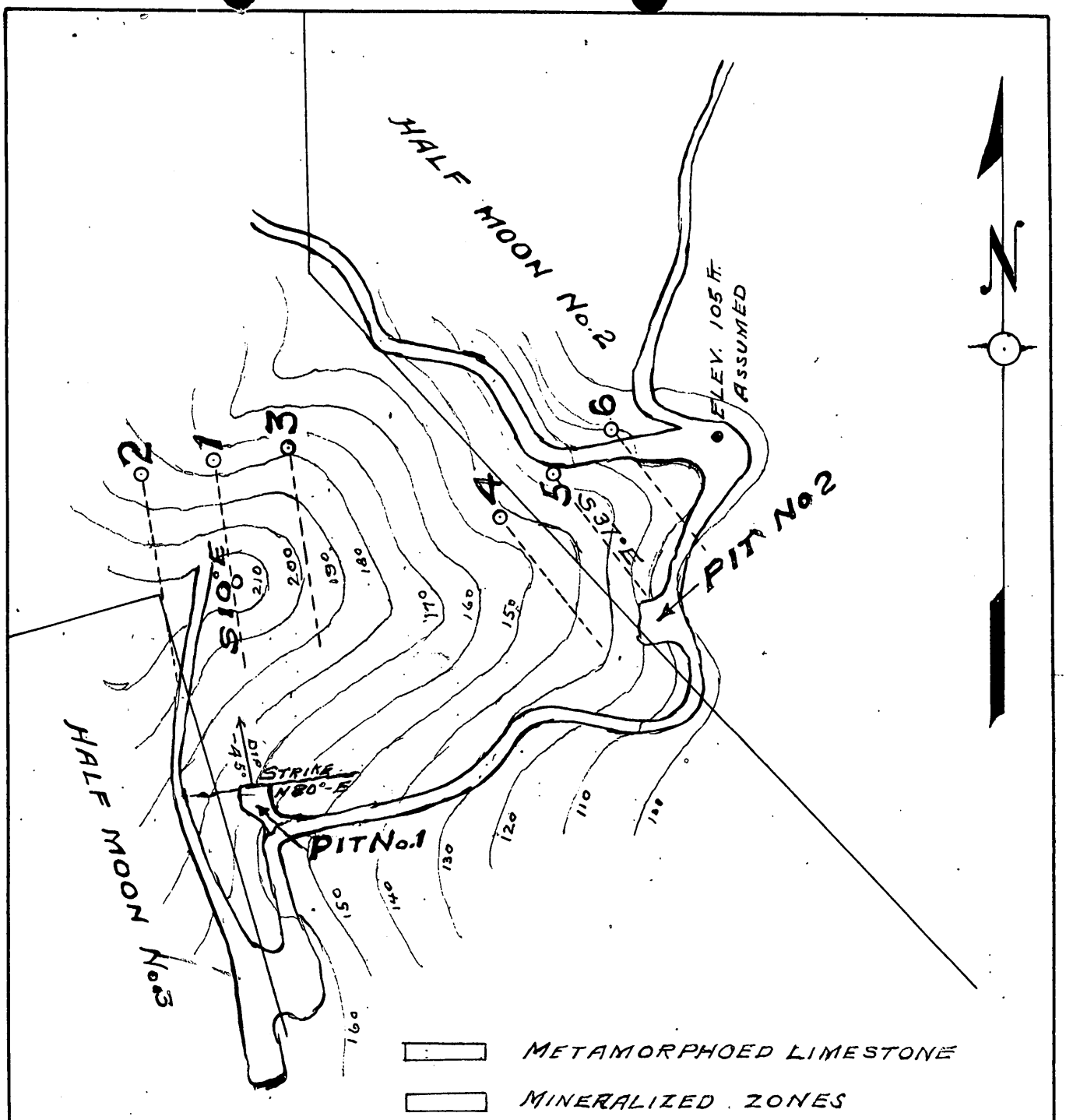
Respectfully submitted,

L.C.Penhoel



MAP TO ACCOMPANY INTERIM REPORT
ON THE SYKES PROPERTY
I.D.M.E 366
AUGUST & SEPTEMBER 1952.
SCALE 1 IN. = 100 FT.
C.A. Liddell, ENGINEER

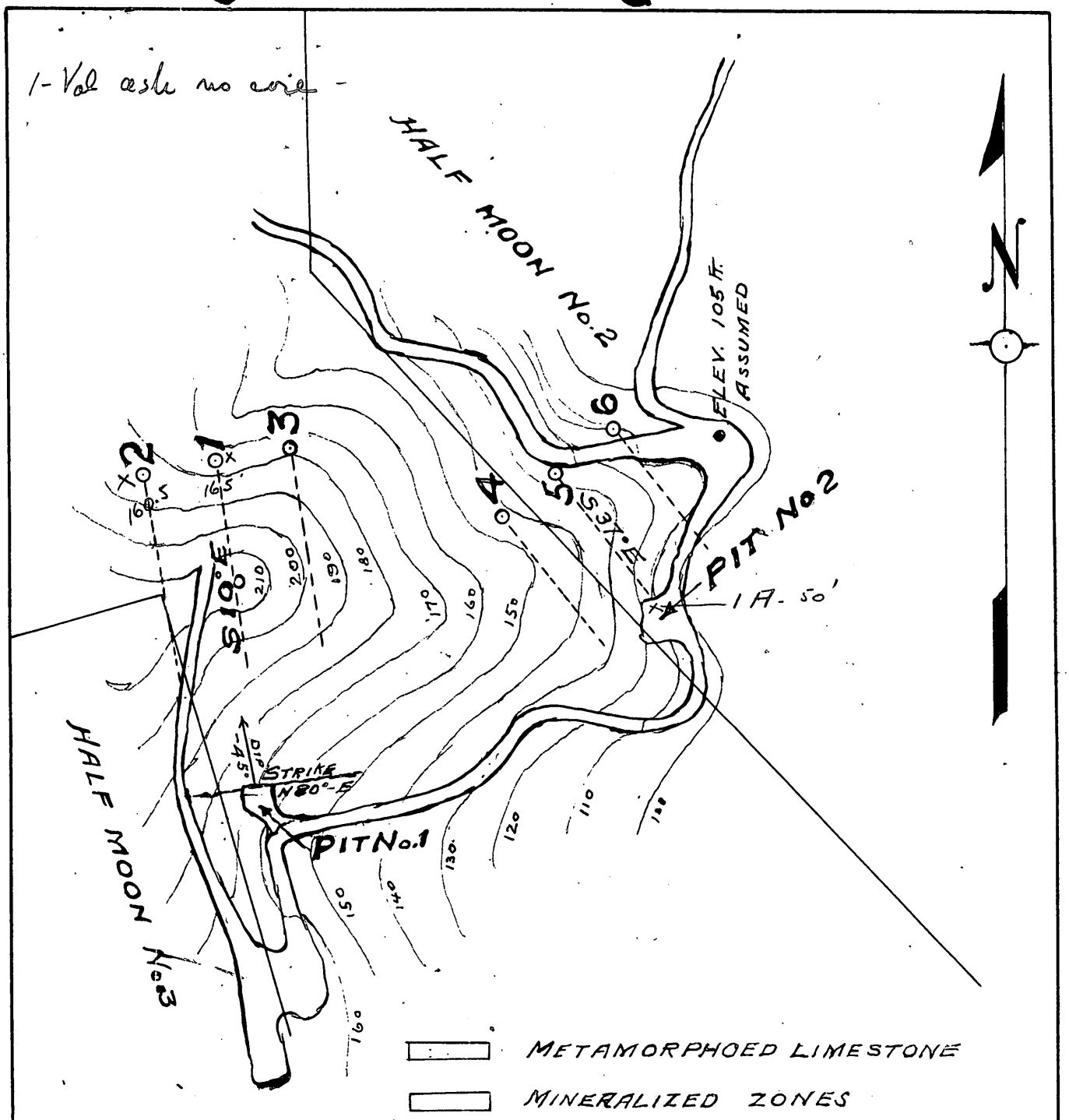
SHEET No. 1.



MAP TO ACCOMPANY INTERIM REPORT
ON THE SYKES PROPERTY
I.D.M.E 366
AUGUST & SEPTEMBER 1952.
SCALE 1 IN. = 100 FT.
C. A. Liddell, ENGINEER

SHEET No. 1.

1-Vol ash no core -



MAP TO ACCOMPANY INTERIM REPORT
ON THE SYKES PROPERTY
I.D.M.E 366
AUGUST & SEPTEMBER 1952.
SCALE 1 IN. = 100 FT.
C.A. Liddell, ENGINEER

SHEET No. 1.

400

FILE COPY
SURNAME:

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

Rutledge
Martin
Selfridge
Johnson
Mattauch

BB

AIR MAIL

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

APR 27 1953

J.C. 4/27/53

Re: Docket No. DMEA 2381 - Tungsten
Irene Sykes
Rock Hill Property
Esmeralda County, Nevada
Contract No. Idm-E366

Dear Mr. Miller:

In reviewing the Field Team's Final Report on the above-referenced project, we note that disposition has not been made of an item of equipment, one mineral light.

It will be appreciated if you will arrange with Mrs. Sykes for appropriate action so that we may close our files on this operation.

Sincerely yours,

George C. Selfridge (GCB)
Chairman, Operating Committee

Approved:

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

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

FARutledge/ls
4/22/53

cc: Docket
FT, Reg. 3
Code 400
Adm. Reading File
D. M. Lemmon, USGS
R. W. Geehan, USBM
Operating Committee

FILE COPY
SURNAME:

Talbert

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

APR 21 1953

Mr. George Mayer
DMEA Auditor
1012 Flood Building
870 Market Street
San Francisco 2, California

Subj: Idm-1366, DMEA-2381
Irene S. Sykes

Dear Mr. Mayer:

Reference is made to your Report of Review, dated January 20, 1953, covering final settlement of the subject contract.

It is noted that no deduction from the total costs as billed by the contractor was taken for any proceeds from the sale or disposition of project property in which the Government has an equity. Neither is there any record in our files of the Executive Officer's waiver of interest in any property.

J. C. 4/21/53

The Field Team's Final Report on this project, prepared by Mr. B. H. Sheehan, Mining Engineer, on March 6, 1953 and submitted by the Executive Officer's letter of April 8, 1953, contains on page 6 thereof the following reference to equipment purchased:

"1 Mineral light with battery and filter.
Condition fair

Purchase price listed	$56.00
Salvage value: estimated	40.00

Recommended disposition:
Operator should purchase this item."

Please check into this discrepancy and advise.

Sincerely yours,

(Signed) J. L. Chambers

Jay L. Chambers, Chief
Contract Administration
and Audit Division

EDTalbert/wb
April 20, 1953

Copy to: Docket
Admr. Reading File
Mr. Chambers

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

Office of
Executive Officer
DMEA Field Team
Region III

APR 13 1953

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

April 8, 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-2381 (Tungsten)
Irene Sykes, Rock Hill Property, Esmeralda County, Nevada, Contract Idm-E366

Reference is made to your subject letter, dated March 2, 1953, requesting a final field team report and a final Operator's report on the Rock Hill Property.

Attached are four copies of the field team's final report entitled "Contract No. Idm-E366, DMEA-2381, Mrs. Irene Sykes, Rock Hill Mine, Esmeralda County, Nevada," by Benjamin H. Sheahan, Mining Engineer, U. S. Bureau of Mines, dated March 6, 1953.

Attached also are four copies of the Operator's final report. We find, however, that one of the four copies is not complete as it includes only the engineer's report with no copies of the diagramitic log of drill hole 1-A, diagramitic log of drill hole No. 2, and assay map cut No. 2.

Furthermore, it is noted on page 3 of Mr. Penhoel's report that three papers are attached to his report. We did not receive any copies of item (1) C. A. Liddell survey with diamond drill holes Numbers 1-2-3-4-5 and 6 plotted; with the approximate location of hole 1-A plotted later.

Mr. Johnson called Mrs. Sykes' attention to the missing parts of her final report on March 16, but to date none of the missing papers have been received. Rather than hold up sending in

Reviewed by
DMEA OPERATING COMMITTEE
4-17-53
(date)

the final reports until we receive the missing sheets, which probably will never reach us, I am sending what we have trusting that they will meet your needs so that the docket may be closed.

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

Attachments

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

FINAL REPORT

Contract No.: Idm-E366

DMEA-2381, Mrs. Irene Sykes, Rock Hill Mine

Esmeralda County, Nev.

Benjamin H. Sheahan, Mining Engineer
U. S. Bureau of Mines

March 6, 1953

Reviewed by
DMEA OPERATING COMMITTEE
4-17-53
(date)

FINAL REPORT

Docket No.: DMEA-2381 (Tungsten) March 6, 1953

Name and address of operator: Mrs. Irene Sykes
1239 S. Beverley Glen Blvd.,
Los Angeles 27, Calif.

Name and location of property: Rock Hill Mine,
Esmeralda County, Nev.

The property is located in sec. 34, T. 4 N., R. 36 E., M.D.B.&M. To reach the property from Mina, Nev., follow U. S. Highway 95 south 20.6 miles. The site of the exploration work is one-half mile west of the highway (see fig. 1).

Contract No: Idm-E366

SUMMARY

Exploration work with Government assistance was commenced in August 1952. The proposed work was divided into two stages:

Work authorized under Stage 1 was to consist of two parts:

1. Surface trenching in the mineralized zone; and (2) by 640 feet of core drilling.

Stage 2 was never started.

The operator's engineer prepared a topographic map showing the location of proposed drill holes which was submitted for approval in September 1952.

The drilling operation was conducted by an independent contractor. The operator reported that 375.5 feet of core drilling was completed. No ore was discovered. The only tungsten mineralization reported by the operator was from hole No. 1X where an 0.18 percent tungsten trioxide assay was obtained.

Exploration work was terminated on December 15, 1952, at the request of the operator.

The engineer[1] inspected the property on December 11, 1952. Available reports and correspondence were studied to complete this final report.

CONCLUSIONS

The operator did not conduct the exploration work competently.

The first stage of the exploration work was not completed. The objectives were not reached; however, preliminary information obtained from this work indicated that the second stage of the exploration work was not warranted.

RECOMMENDATIONS

1. Additional exploration work is not warranted.
2. DMEA should certify that the project was not successful.
3. Production is not economically feasible.
4. The operator should submit a complete final report. He should also be advised to retain records for a period of three years.

DESCRIPTION OF WORK COMPLETED

Exploration work comprised surface trenching, some road work, and diamond drilling. A topographic map was prepared by the operator's engineer showing the location of proposed diamond drill holes. Three holes were drilled at the property. Hole 1X was not drilled according to plan.

Hole No.	Depth/feet	Remarks
1X	50.0	No ore discovered
2	160.5	Do, hole did not reach objective.
3	165.0	No ore discovered
Total	375.5	feet reported by operator (see fig. 2)

1/ B. H. Sheahan, Mining Engineer, U. S. Bureau of Mines.

Exploration work was started on August 18, 1952. The operator, Mrs. Irene Sykes, reported that exploration work was stopped on December 15, 1952. The contract was signed on July 3, 1952 and was terminated on January 14, 1953.

DESCRIPTION OF GEOLOGY

The rocks of the area are interbedded sandstone, limy slate and impure limestone and dolomite which have been locally metamorphosed.

Map (fig. 2) was assembled from data submitted by the operator and from an interim examination by the inspecting engineer[2].

ESTIMATE OF ORE RESERVES

Measured . . . . . None
Indicated . . . . None
Inferred . . . . . None

The occurrence of tungsten mineralization is widespread; however, the mineralized areas are either too low grade or too small to constitute ore deposits.

Information obtained from core drilling reported by the operator and a log of a part of hole No. 2 by the engineer follows:

Hole No.	Depth/feet	Remarks
1X	0 - 9	Limestone - brecciated
	9 - 11	Tactite assay 0.18 percent WO_3
	11 - 50	Metamorphosed limestone with tactite. Core hauled to Los Angeles (From L. C. Penhoel, supervisor & geologist, Operator's final report)
2	0 - 26	(Core hauled to Los Angeles, Calif. by L. C. Penhoel) metamorphosed limestone. No plus 0.10% WO_3
	26 - 36	Core logged by inspecting engineer Dec. 11, 1952. Blue metamorphosed limestone 26 feet to 160.5 feet).

2/ B. H. Sheahan, Mining Engineer, U. S. Bureau of Mines, Interim Report dated Dec. 15, 1952. (Contract Idm-E366).

Hole No.	Depth/feet	Remarks
2 (cont'd.)	36 - 66	Blue, grey and buff colored limestone
	66 - 97	Blue grey shaly limestone
	97 - 108	Fractured grey limestone
	108 - 127	No core recovery - few chips grey limestone
	127 - 160.5	Blue to grey fractured limestone Core recovery averaged less than 10 percent (Mr. L. C. Penhoel reported less than 0.10 percent WO_3 on all core and sludge samples)
3	165	Depth reported by operator and diamond driller. The operator did not submit a log of this hole. Results are unknown, but were apparently discouraging.

Map (fig. 3) attached to this report showing topography, surface geology, sample locations and analyses were included with the engineer's[3/] and geologist's[4/] examination report. This map was assembled by a geologist[5/] employed by the operator and was submitted with the operator's application for an exploration loan. Samples were taken by engineers[6/] of the Bureau of Mines and were listed with analyses on this map (fig. 3).

EXPENDITURES

Total approved	$10,600.00
Total cost of project	5,319.51
Government's share of cost	3,989.63
Government's share unexpended . .	3,960.37
Value of production during operations:	None

3/ R. R. Trengove, mining engineer, U. S. Bureau of Mines.
4/ R. G. Reeves, geologist, U. S. Geological Survey.
5/ D. L. Davis: Report on Cobalt-Tungsten Associates Mine, Esmeralda Co., Nev.
6/ R. R. Trengove and John D. Warne: Report of examination, Rock Hill Tungsten Deposits, Esmeralda County, Nevada, March 13, 1952 (DMEA-2381).

Diamond drilling was done by the Continental Drilling Co. The price per foot was $7.00 for drilling BX, AX, or EX size core. This independent subcontract was signed on November 26, 1952.

The diamond drill contractor terminated drilling operations at the request of the operator. The operator was charged only for the footage of core drilling completed.

EFFICIENCY OF OPERATIONS AND COMPETENCY OF OPERATOR

The overall efficiency of the exploration operation was poor. The operator was not competent, yet attempted to conduct and supervise the exploration work part of the time.

The operator failed to notify the Mining Division of the U. S. Bureau of Mines when the drilling operation was started. On Dec. 10, 1952 the operator notified the Chief, Mining Division, Region III that no core or sludge was being recovered. The operator sent the supervisor-geologist to Los Angeles, Calif., to log and have the core from hole No. 1X assayed, while diamond drilling operations were conducted at hole No. 2, and hole No. 3.

The operator's final report was not complete as it did not include the log of hole No. 3. According to the driller's daily report, hole No. 3 was drilled to a depth of 165 feet. The casing was pulled and the drill was moved on Dec. 15, 1952.

The narrative reports submitted by the operator did not show the amount or location of the surface trenching. Samples taken by the operator were not representative of material that could be mined.

Exploration work conducted at an adjoining property by a private

concern was unsuccessful.

EQUIPMENT PURCHASED FOR PROJECT

The operator's monthly report and voucher lists the following item:

1 Mineral light with batter and filter.
Condition fair

Purchase price listed: $56.00
Salvage value: estimated 40.00

Recommended disposition: Operator should purchase this item.

FILE COPY
SURNAME:

Rutledge
Martin
Selfridge

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

BW

MAR 2 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 2381 - Tungsten
Irene Sykes
Rock Hill Property
Esmeralda County, Nevada
Contract No. Idm-E366

Dear Mr. Miller:

Reference is made to the subject contract for which a final audit has been received. It will be appreciated if you will furnish this office with a final Field Team report and a final Operator's report. If no final report has been received from the Operator, Mrs. Sykes should be requested to furnish such a report as specified in Article 7(b) of the contract in order that this docket may be closed.

Sincerely yours,

George C. Selfridge (JHB)

Chairman, Operating Committee

GW. 3/2/53

Approved:

J. H. Hedges (JHB)

Member, Bureau of Mines

T. P. Thayer (JHB)

Member, Geological Survey

FARutledge/ls
2/27/53

cc: Docket
FT, Reg. 3
Admn. Read. File
Code 400
Oper. Committee
D. M. Lemmon, USGS
R. W. Geehan, USBM

Docket

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

Office of
Executive Officer
DMEA Field Team
Region III

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

February 27, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 3 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-2381 (Tungsten), Irene Sykes, Rock Hill Property, Esmeralda County, Nevada, Contract Idm-E366

Reference is made to your subject letter, dated February 12, concerning the footage drilled on this property.

Attached is a copy of a memorandum from A. C. Johnson, dated February 24, which I believe gives the information you desire.

Mr. Sheahan's final report will be sent to you as soon as received.

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

Att achment

Copy to: E. H. Bailey, USGS

Copy retained 400

C
O
P
Y

Reno, Nevada

February 24, 1953.

Memorandum

To: Mr. M. C. Miller, Executive Officer, DMEA Field Team Region III

From: Chief, Mining Division, Region III

Subject: Docket DMEA-2381 (Tungsten), Irene Sykes, Rock Hill Property, Esmeralda County, Nevada, Contract Idm-E366

This project was closed out in the San Francisco Office. The MP-104 and MP-104A forms were brought in my office, by you, for my signature with the exception of one that was later sent to my office for signature.

Mr. Sheahan visited the property on December 11, 1952, and at that time one hold had been drilled to a depth of 40 feet and another hole had been drilled to a depth of 160½ feet. The drill was set up on a third hole where actual drilling was in progress. This hole was evidently completed to a depth of 165 feet, as shown by the Continental Drilling Company's daily reports. According to the driller's log NX casing was set to 145 feet and the hole was finished at a depth of 165 feet. The hole was completed and AX and NX casing was pulled and drill moved on December 15, 1952.

The 10 feet discrepancy is probably due to the first hole, as the engineer that Mrs. Sykes had on the property showed that this hole reached a depth of 50 feet.

Mr. Sheahan is working on the final report on the Sykes property and you should receive it within the next few days.

/s/ A. C. Johnson

400

FILE COPY
SURNAME:

Chapman
Martin
Selfridge

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

FEB 12 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 2381 - Tungsten
Irene Sykes
Rock Hill Property
Esmeralda County, Nevada
Contract No. Idm-E-366

Dear Mr. Miller:

We are in receipt of monthly report Forms MF-104 and MF-104A, for November and December 1952, on the above-noted project.

We note that payment was made for 375 feet of diamond drilling. The last interim report by Mr. Sheahan, dated December 15, 1952, advised that 160.5 feet of diamond drilling had been completed. We do not have any report in our files showing where the balance of 214.5 feet was drilled, or the results of this drilling. Would you please advise us concerning this additional drilling.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

2-12-53

Approved:

J. H. Hodges

Member, Bureau of Mines

/s/ D. M. Lemmon

Member, Geological Survey

cc: Docket
Field Team, Region 3
Code 400
Admn. Read. File
Operating Committee
R. W. Geehan, USBM
D. M. Lemmon, USGS

TLChapman/hhb
2/11/53

400

FILE COPY
SURNAME:

Chapman
Mahlin
Selfridge

B.W.

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

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

FEB 9 1953

Re: Docket No. DMEA 2381 - Tungsten
Mrs. Irene Sykes
Rock Hill Mine
Esmeralda County, Nevada
Contract No. Idm-E-366

Dear Mr. Miller:

We acknowledge receipt of your memorandum of January 21, 1953, and termination agreement on the subject property. J.C. 2/9/53

We do not have Forms MF-104 and MF-104A, and narrative reports after September 1952. If you can, please send us copies of these reports so we may close our files.

Sincerely yours,

George C. Selfridge
(JHB)

Chairman, Operating Committee

Approved:

J. E. Benson (JHB)
Member, Bureau of Mines

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

cc: Docket
Field Team, Region 3
Code 400
Admn. Read. File
R. W. Geehan, USBM
D. M. Lemmon, USGS
Operating Committee

TLChapman/hhb
2/6/53

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 26 1953

Office of
Executive Officer
DMEA Field Team
Region III

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

January 21, 1953

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Contract Idm-E366, Docket DMEA-2381 (Tungsten), Irene Sykes Property, Esmeralda County, Nevada

Attached for your files are the original and two copies of the termination notice, dated January 14, 1953, which has been executed on the part of the Operator and the Government.

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

Attachment

Copy to: A. C. Johnson, Reno, Nevada (with copy of notice)
Finance Officer, Region III (with copy of notice)
E. H. Bailey, USGS
G. Mavor, DMEA, Region III

RECEIVED
JAN 28 1953
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

cal 1-26-53

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

Office of
Executive Officer
DMEA Field Team
Region III

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 1 5 1953

January 14, 1953

Mrs. Irene Sykes
1239 S. Beverly Glen Boulevard
Los Angeles 24, California

Docket DMEA-2381 (Tungsten)
Contract Idm-X366
Irene Sykes Property
Esmeralda County, Nevada

Dear Mrs. Sykes:

Following our conversation today in this office, the enclosed termination notice in connection with subject contract has been prepared and six copies are submitted for your signature.

When you have affixed your signature, will you kindly return the original and four copies to this office, retaining one copy for your files.

Sincerely yours,

H. C. MILLER

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

Enclosure

Copy to: Operating Committee, DMEA, Washington, D. C.
E. H. Bailey, USGS
A. C. Johnson

AMeiers:

Files
Chrono

400

FILE COPY
SURNAME:

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

BW.

Maylin
Selfridge
Gilbert
Hollman
Matthews

JAN 1 2 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. 2381 - Tungsten
Mrs. Irene S. Sykes
9 Half Moon & Rock Hill claims
Esmeralda County, Nevada
Contract No. Idm-E-366

Dear Mr. Miller:

Enclosed are two copies of a memorandum dated December 31, 1952, from our Chief Counsel to the Administrator, regarding the size of diamond drill holes at the subject project as called for by the diamond drilling subcontract.

As you will observe from the above, the subcontract as written allows drilling of NX holes instead of the AX holes specified in Contract Idm-E-366, but makes no corresponding reduction in the price to be paid per foot of hole drilled. We note, however, from Mr. B. H. Sheahan's report of December 15 that the 210.5 feet of drilling completed to that date was AX size.

We also learn from Mr. Sheahan's same report that Mrs. Sykes is discouraged with the results of the diamond drilling and is undecided about further work. In the event that the project is terminated before completion of the 640 feet of drilling called for by Stage I of the contract, Mrs. Sykes may find herself in disagreement with Continental Drilling Company. If that company claims that the subcontract of November 26, 1952, guarantees it 640 feet of drilling, any such claim will be against Mrs. Sykes and not against the

J.C. 1/12/53

Government. Our approval of that subcontract is subject to all the terms of Contract Idm-E-366, including Article 4(b) which provides, among other items, that "the Government's right to terminate the exploration project under any of its provisions shall not in any manner be affected by reason of any such independent contract."

Sincerely yours,

Frank E. Johnson (GHB)

Chairman, Operating Committee

Enclosures

APPROVED:

J. H. Hedges (GHB)

Member, Bureau of Mines

A. R. Kinkel, Jr. (GHB)

Member, Geological Survey

WSMartin/ls
1/7/53

cc: DOCKET
ADMN. READ. FILE
FIELD TEAM, REGION III
CODE 400
OP. COMMITTEE
D. M. LEMMON, USGS
R. W. GEEHAN, USBM

ESTABLISHED 1916

EISENHAUER LABORATORIES
ENGINEERING DIVISION
316 SOUTH SAN PEDRO STREET
LOS ANGELES 13, CALIFORNIA

ED. EISENHAUER, JR.
L. C. PENHOEL

PHONE: VANDIKE 9328

January 8, 1953.

FILE NO.163.

Irene S. Sykes,
1239 South Beverly Glen Blvd.,
Los Angeles 24, California.

Account; Rock Hill Tungsten Property,
Esmeralda County, Nevada.

Progress Report, IDME 366,
November-December 1952 and January 1953.

Foreword;

The field work as owner's engineer in the IDME 366 diamond drill program, started on December 3,1952 at which time hole 1-A was completed and drilling hole 2 was in progress.

On December 5, Mr. C.A.Liddell, the retiring owner's engineer, was confered with at the property.

Mr. Liddell turned over maps and verbally reviewed information obtained by engineers of the Bureau of Mines and himself upon which the drilling program to drill 6 holes, with a total footage of 1000 feet, was recommended.

With the exception of hole 1-A, the holes are plotted as shown on Plate NO.1 of Mr. Liddell's survey,print of which is attached.

All of the holes with the exception of hole 1-A, are of the nature of crosscuts to intersect the downward projection of possible ore.

On December 4 surface areas were gone over, both during the day and after dark with a violet-ray lamp.

On December 5, samples were taken from areas where work had been done and exposures indicated that ore might be developed. Six of these samples were taken from Cut NO.2 and one from Cut NO.1.

Due to stormy weather the work was done under difficulty and on the afternoon of December 5, weather conditions became so bad that it was decided to return to Los Angeles with the core of the first 35 feet from hole 2, arrange for core and sludge boxes and return prepared to take up residence and record the work and results of drilling.

On December 9, before arrangements were completed to return to the property, the contractor reported that in hole 3 it was impossible to obtain a satisfactory core or sludge sample.

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EISENHAUER LABORATORIES
ENGINEERING DIVISION
316 SOUTH SAN PEDRO STREET
LOS ANGELES 13, CALIFORNIA

ED. EISENHAUER, JR.
L. C. PENHOEL

PHONE: VANDIKE 9328

January 9, 1957.

FILE NO.163.

Under the conditions that one or more of the remaining holes would probably be in shattered ground and with a difference of opinion, that ~~that~~ the results from the drilling, even if completed, would justify the expenditure, it was recommended that Mr. Johnson of the Reno office be notified. The result was that Mr. Sheean was sent to the property and he agreed, that every thing considered, the contractor should be excused for noncompliance for reasons beyond his controland the contractor waiving any claim except for the completed footage drilled, moved his rig off the property on Dec. 15.

Core and sludge samples and the driller's log of hole 3, are being sent direct to the Reno office.

Summary;

The immediate area within which the drill holes have been located is principally made up of metamorphosed limestone with much folding and some faulting.

Local areas show brecciated white lime in dense blue silicified limestone. In shattered areas impure limestones weather to dust. Other areas have been altered to tactite.

Scheelite at times occurs in the quartz-pegmatite veins and in the hard siliceous blue limestone adjacent to the walls of the quartz veins for one or more feet. The more prominent occurrence of scheelite is in the tactite rock

The quartz veins are numerous, often only a few feet apart. Their general strike is east and west with dips at high angles to the north. Widths, where viewed, are rarely more than 8 to 12 inches wide. They represent the more fluid constituent of pegmatite dikes and probably were the channels from the granite for the scheelite mineral solutions.

From evidence shown by rock in the dump from the "old shaft", reported to be 300 feet deep, there is a bed of micaceous schist, of unknown thickness, between the granite and the limestone.

This schist shows little or no scheelite and it is probable that there was no deposition of scheelite until the solutions reached and passed into the limestones.

It is probable that more important concentrations of scheelite exist closer to the contact of the limestone and schist or if the schist is absent, closer to the contact with the granite. That is; more scheelite, all other favorable conditions being equal, would be deposited from the mineral

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EISENHAUER LABORATORIES

ENGINEERING DIVISION
316 SOUTH SAN PEDRO STREET
LOS ANGELES 13, CALIFORNIA

ED. EISENHAUER, JR.
L. C. PENHOEL

PHONE: VANDIKE 9328

January 9, 1953.

FILE NO.163.

bearing quartz-pegmatite channels close to the contact than at distances until until finally the solutions are barren of mineral.

Recommendations;

It is recommended that exposure of scheelite in present trenches or pits be studied and with additional trenching, if deemed necessary, select a place that would warrant a limited amount of prospecting in the nature of test pits or shaft work on the ore.

With compressor and tools on the property the funds left from the uncompleted diamond drill program could be used to advantage to conclude if more extensive exploration work was justified.

Attached to this report are the following papers;

(1) C.A.Liddell survey with DD holes NO's 1-2-3-4-5 and 6 plotted;with the approximate location of hole 1-A plotted later.

(2) Diagramitic log of hole 1A and hole 2.

(3) Sketch, Assay Map showing location and description with WO_3 content of samples taken December 5, 1953.

Respectfully submitted,

L. C. Penhoel

L.C.Penhoel

ESTABLISHED 1916

EISENHAUER LABORATORIES

ENGINEERING DIVISION
316 SOUTH SAN PEDRO STREET
LOS ANGELES 13, CALIFORNIA

ED. EISENHAUER, JR.
L. C. PENHOEL

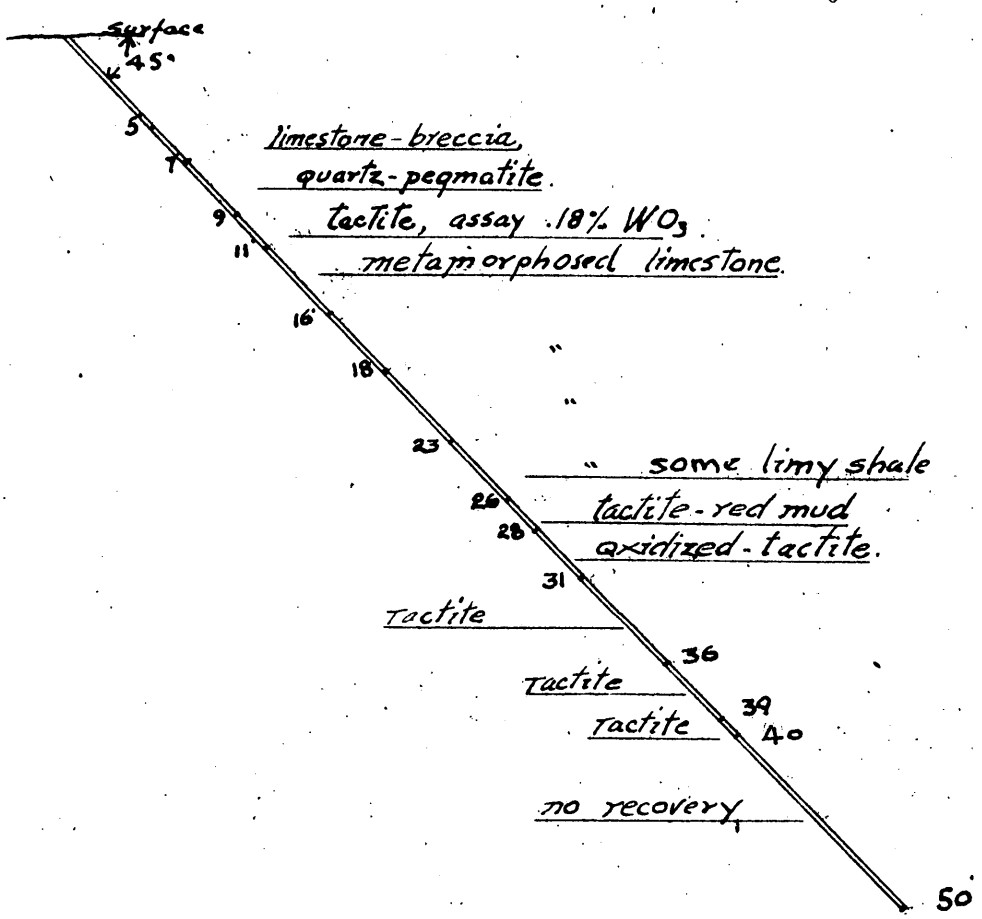
PHONE: VANDIKE 9328

FILE NO. 163.

Irene S. Sykes,
IDME. 366.

BL

LEGEND.			
FOOTAGE	DIAM. CORE	% CORE	WO_3 LESS .1% ✓
5'-7'	1-1/16"	75	✓
7'-9'	"	75	✓
9'-11'	"	30	.18
11'-16'	"	90	✓
16'-18'	1-3/16"	25	✓
18-23'	"	50	✓
23-26'	"	85	✓
26'-28'	"	10	✓
28'-31'	"	30	✓
31'-36'	"	50	✓
36-39'	"	80	✓
39-40'	"	40	✓
40'-50'	"	—	✓



S. ← | → N.

D. D. HOLE 1-A.

L. C. Penhoel
1/9/53.

ESTABLISHED 1916

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ENGINEERING DIVISION
316 SOUTH SAN PEDRO STREET
LOS ANGELES 13, CALIFORNIA

ED. EISENHAUER, JR.
L. C. PENHOEL

PHONE: VANDIKE 9328

FILE NO. 163.

Irene S. Sykes
I. D. M.E. 366.

LEGEND			
FOOT-AGE.	CORE DIAM.	% CORE	DESCRIPTION
1-5	1¾"	75	SILICIFIED LIMESTON BRECCIA
5-6	"	50	TACTITE - OXIDIZED.
6-7	"	—	" "
7-11	"	60	METAMORPHOSED SCHIST
11-14	"	40	SILICIFIED LIMESTONE
14-15	"	60	SLATE
15-17	"	30	ALTERED LIMESTONE
17-19	"	30	" "
19-21	"	90	LIME SHALE
21-26	1⅛"	5	OXIDIZED LIME SHALE
26-28	"	50	SILICEOUS "
28-30	"	25	SLATE
30-31	"	40	"
31-35	"	5	" QUARTZ STRINGERS
35-36	"	50	SLATE
36-38	"	45	"
38-40	"	45	"
40-44	"	—	
44-49	"	5	SLATE
49-55	"	—	
55-61	"	30	SLATE

LEGEND			
FOOT-AGE	CORE DIAM.	% CORE	DESCRIPTION
61-66	1⅛"	10	SLATE
66-71	"	25	"
71-76	"	15	"
76-83	"	4	"
83-90	"	4	"
90-97	"	4	"
97-103	"	10	LIME SCHIST
103-108	"	5	" "
108-128	"	—	
128-132	"	10	SLATE
132-140	"	10	" QUARTZ SEAM
140-155	"	10	" ALTERED LIMESTONE
155-160	"	10	" " "
			NO WO_3 PLUS .1% TO 160'.
			SLUDGE 142-147 REACTED
			FOR LIMESTONE AND PAN-
			NED CONSIDERABLE IRON
			PYRITE.
			SLUDGE, -160, SAME AS
			ABOVE.

D.D. HOLE 2.

DIP 45°, BEARING S 10° E, DEPTH 160'.

L. C. Penhoel
1/9/53.

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LOS ANGELES 13, CALIFORNIA

ED. EISENHAUER, JR.
L. C. PENHOEL

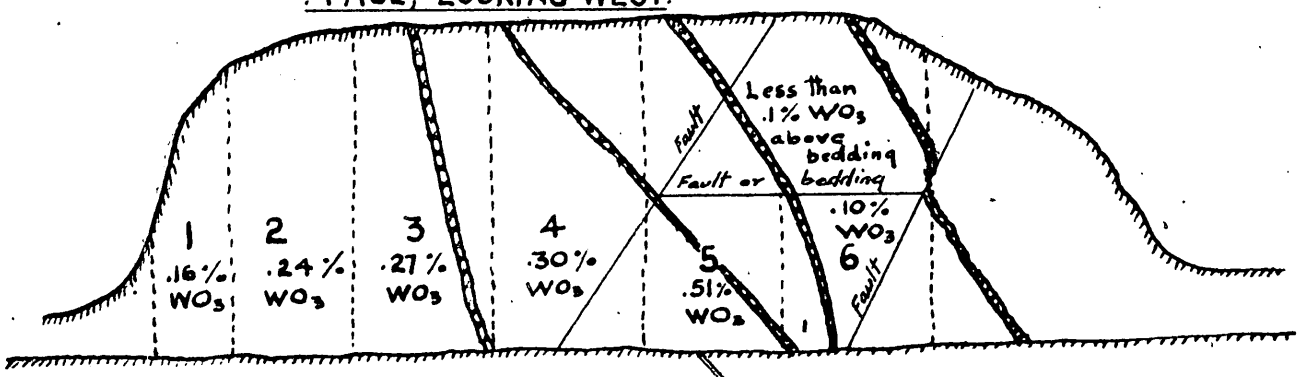
PHONE: VANDIKE 9328

FILE NO. 163.

Irene S. Sykes.
I.D.M.E. 366.

Assay Map - Cut No. 2.

FACE, LOOKING WEST.



Sample #1.- ht. 8' - W 8', soft weathered Lms.

2- " 8' - " 5', gray Lms - tactite.

3- " 8' " 6', " " "

4- " 7' " 6', iron stained weathered tactite - high grade seam at bottom.

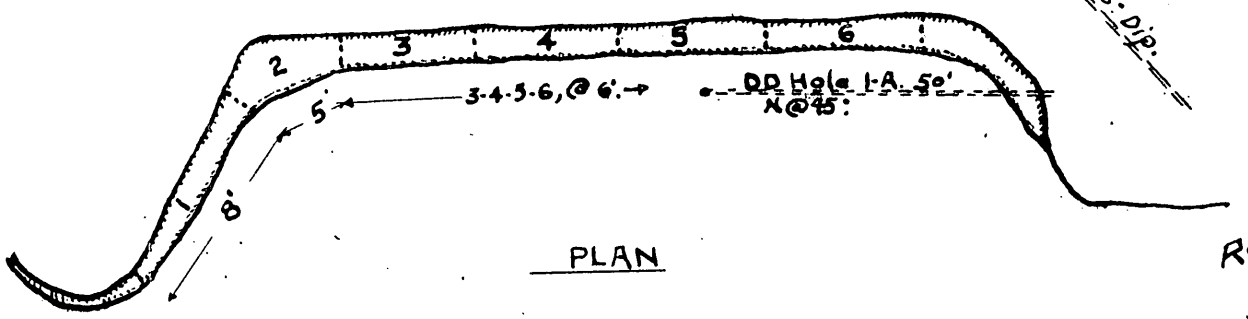
5- " 5' " 6' tactite.

6- " 5' " 6' limy slate, some tactite.

Quartz-pegmatite veins.

2' tactite, assay .18% WO_3

DD Hole 1A 50' Bearing N@45° Dip.



PLAN

Road

L. C. Penhoel
1/9/53

ESTABLISHED 1916

EISENHAUER LABORATORIES
ENGINEERING DIVISION
316 SOUTH SAN PEDRO STREET
LOS ANGELES 13, CALIFORNIA

ED. EISENHAUER, JR.
L. C. PENHOEL

PHONE: VANDIKE 9328

January 9, 1953.

FILE NO.103.

Irene S. Sykes,
1239 South Beverly Glen Blvd.,
Los Angeles 24, California.

Account; Rock Hill Tungsten Property,
Esmeralda County, Nevada.

Progress Report, IDME 366.
November-December 1952 and January 1953.

Foreword;

The field work as owner's engineer in the IDME 366 diamond drill program, started on December 3,1952 at which time hole 1-A was completed and drilling hole 2 was in progress.

On December 5, Mr. C.A.Liddell, the retiring owner's engineer, was confered with at the property.

Mr. Liddell turned over maps and verbally reviewed information obtained by engineers of the Bureau of Mines and himself upon which the drilling program to drill 6 holes, with a total footage of 1000 feet, was recommended.

With the exception of hole 1-A, the holes are plotted as shown on Plate NO.1 of Mr. Liddell's survey,print of which is attached.

All of the holes with the exception of hole 1-A, are of the nature of crosscuts to intersect the downward projection of possible ore.

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On December 9, before arrangements were completed to return to the property, the contractor reported that in hole 3 it was impossible to obtain a satisfactory core or sludge sample.

ESTABLISHED 1916

EISENHAUER LABORATORIES
ENGINEERING DIVISION
316 SOUTH SAN PEDRO STREET
LOS ANGELES 13, CALIFORNIA

ED. EISENHAUER, JR.
L. C. PENHOEL

PHONE: VANDIKE 9328

January 8, 1957.

FILE NO.163.

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Core and sludge samples and the driller's log of hole 3, are being sent direct to the Reno office.

Summary;

The immediate area within which the drill holes have been located is principally made up of metamorphosed limestone with much folding and some faulting.

Local areas show brecciated white lime in dense blue silicified limestone. In shattered areas impure limestones weather to dust. Other areas have been altered to tactite.

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L. C. PENHOEL

PHONE: VANDIKE 9328

January 9, 1953.

FILE NO.163.

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Recommendations;

It is recommended that exposure of scheelite in present trenches or pits be studied and with additional trenching, if deemed necessary, select a place that would warrant a limited amount of prospecting in the nature of test pits or shaft work on the ore.

With compressor and tools on the property the funds left from the uncompleted diamond drill program could be used to advantage to conclude if more extensive exploration work was justified.

Attached to this report are the following papers;

(1) C.A.Liddell survey with DD holes NO's 1-2-3-4-5 and 6 plotted;with the approximate location of hole 1-A plotted later.

(2) Diagramitic log of hole 1A and hole 2.

(3) Sketch, Assay Map showing location and description with WO_3 content of samples taken December 5, 1953.

Respectfully submitted,

L. C. Penhoel

L.C.Penhoel

140 Docket

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

119

December 31, 1952

Memorandum

To: Administrator

From: Chief Counsel

Subject: Irene Sykes, DMEA-2381, Idm-E366, Subcontract with Continental Drilling Company

The subject subcontract has been executed in the field and is in full force and effect. If it had been submitted here for review it would not have been approved.

The exploration contract provides that "the diamond drill holes shall be of AX size." The subcontract provides for drilling "BX, AX, and EX core holes." Thus there is a discrepancy between the drilling provided for in the exploration contract and the drilling provided for in the subcontract.

No doubt the subcontract intends that the operator may drill holes of BX size to the extent that it is necessary to accomplish AX coring, and may drill the hole of AX size to the extent that is necessary to accomplish EX coring. However, as the subcontract is written, the drilling contractor would comply with its terms if he did nothing but EX drilling, for which he would receive $7 per lineal foot.

If EX cores will be satisfactory to the Government, possibly the drilling contract is unobjectionable from that standpoint alone. However, I have difficulty in justifying payment for EX drilling at $7 per foot when the exploration contract provides for AX drilling at an estimated maximum of $7 per foot. It is necessary to construe the approval of the subcontract as an amendment of the exploration contract. I do not think that the G.A.O. will take an exception.

J. L. Hofflund
J. L. Hofflund
Chief Counsel

Attachment

Copy retained 400

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

Rubin

December 31, 1952

Memorandum

To: Administrator

n. s. in R. v. R. 8/

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HCRubin
JLHofflund/mef
cc to: Mails and Files
Admr. R. File
Mr. Selfridge
Mr. Rubin
Mr. Hofflund
Chron.

J. L. Hofflund
Chief Counsel

Attachment

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: Dec. 23, 1952

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 2381

Contract Idm-E 366

Commodity Tungsten

Operator - Mrs. Irene Sykes

Property - Rock Hill Mine, Esmeralda County, Nevada

By Benj. H. Sheahan, Mining Engr.

Dated Dec. 15, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
DEC 2 . 1952

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-2381 (Tungsten) Dec. 15, 1952

Name and address of operator: Mrs. Irene Sykes, owner
Mina, Nevada

Los Angeles address: 1239 S. Beverley Glen Blvd.
Los Angeles 24, Calif.

Name and location of property: Rock Hill Mine,
Esmeralda County, Nev.

The property is located 20.6 miles south of Mina, Nev., on U. S. Highway 95 and one mile west of the highway.

Contract No.: Idm-E366

SUMMARY

Exploration work, consisting of diamond drilling, was started on Nov. 24, 1952. Hole No. 1X was drilled 50 feet at a location not approved by the contract. This hole was drilled at Pit 2, almost directly down the dip of the mineralization.

Mr. L. C. Penhoel, supervisor-geologist, for the operator, Irene Sykes, was not at the property. All of the core from hole No. IX and part of the core from hole No. 2 was taken to Los Angeles for logging and assaying. Core and sludge recovery was very poor. The operator is discouraged with early results of the drilling exploration work. The operator reported that a contract had been let for 640 feet of drilling although 160.5 feet of drilling was completed.

The crew at the property on Dec. 11, 1952 at the time of the inspection consisted of Mrs. Irene Sykes, owner, a diamond driller and helper, and one sampler employed by Mrs. Irene Sykes.

CONCLUSIONS

1. The exploration work is not being properly supervised.

2. Both core recovery and sludge recovery are poor; amounting to about 10 percent.

3. Hole No. 2 did not reach the calculated objective and showed no tungsten mineralization.

4. The second stage of the exploration work is not warranted.

RECOMMENDATIONS

(a) For improvement of operation:

(1) The supervisor-geologist should stay on the job while drilling operations are being conducted.

(2) Core and sludge recovery could be improved but proper supervision is needed.

Unless the project is properly supervised the contract should be terminated.

STATEMENT OF WORK COMPLETED

Exploration work completed on the project since the operator's interim report for August and September 1952 by C. A. Liddell, engineer, formerly employed by Mrs. Sykes, consisted of 160.5 feet of diamond drilling. The work was done by contract with Continental Drilling Co. Mr. L. C. Penhoel was reported to be employed as supervisor-geologist by Mrs. Sykes, however he was not on the property at the time of the inspection.

Sheet No. 1 of operator's August and September interim report shows the location of the exploration work. At Pit No. 2, Hole No. 1X was drilled to a depth of 50 feet, bearing North, inclination -46 degrees. The core was taken to Los Angeles by Mr. Penhoel for logging and assaying. At drill site No. 2 , a hole was drilled 160.5 feet, bearing southerly, inclination -45 degrees. Core recovery was less than 10percent and sludge recovery amounted to three 5-pound samples. Hole No. 2 failed to reach its objective or proposed depth.

The drill was located at drill site No. 1 on Dec. 11, 1952.

According to Mrs. Sykes, the drill hole sites were staked out by Mr. Liddell, as shown on his map (sheet 1) attached to operator's September narrative report.

COMMENTS ON PROGRESS

The diamond drill crew moved their equipment to the property on Nov. 24, 1952. The drill crew was reported to have worked a seven day week.

Hole No. 1X was started about Nov. 27 and stopped one day later at a depth of 50 feet. This hole was not located according to plans submitted by the operator's engineer.

Hole No. 2 (sheet 1) was started on Nov. 29, 1952 and drilled to a depth of 160.5 feet. A cavity was encountered at this depth and the drill was moved to hole No. 1 location on Dec. 10, 1952. Core and sludge recovery was very poor. Hole No. 1 was started on Dec. 11, 1952.

UNUSUAL CIRCUMSTANCES

Although the owner of the property has a supervisor-geologist, Mr. L. C. Penhoel, he was not at the property on Dec. 11, 1952.

Mrs. Sykes did not notify the U. S. Bureau of Mines when the diamond drilling was started as she had stated in previous letters she would do.

OPERATING CONDITIONS

Operating conditions are good, although considerable care is required to obtain core and sludge from the drilling operation in this ground.

EFFICIENCY OF OPERATION

Core and sludge recovery is poor and the supervisor of the work should be on the job while drilling operations are being conducted. If casing of the hole is required, arrangements should be made between the operator and the drilling contractor.

OPERATOR'S MONTHLY REPORTS

The Operator's Monthly MF-104 and MF-104A for August and September are available at the Reno, Nev. office U. S. Bureau of Mines, Mining Division, Region III. The operator failed to provide full documentation for charges listed. The narrative report did not show the amount of trenching work performed or the location of samples.

The operator's narrative report for September included maps and sections of the proposed exploration work.

GEOLOGY AND MINERALIZATION

No tungsten mineralization was found in the core of hole No. 2,

drilled to a depth of 160.5 feet. Core and sludge assays have not yet been completed. From a depth of 26 feet to 160.5 feet only 9.4% of the core was recovered. Three sludge samples were obtained by the operator at depths of 137 feet to 142 feet; 147 feet and 152 feet. The core observed from No. 2 hole contained practically no scheelite mineralization. The core was AX size.

OTHER INFORMATION

Mrs. Irene Sykes, the operator, is discouraged with the results of the diamond drilling and is undecided as to further plans. The operator has contracted for a minimum of 640 feet of drilling. A copy of the contract is not available.

Mrs. Sykes informed the U. S. Bureau of Mines, Mining Division, Region III, on Dec. 10, 1952, that the diamond drilling had been started and that core recovery and sludge recovery was poor.

The operator intends to include the core log together with sample analyses with the next narrative report.

Benjamin H. Sheahan

Benjamin H. Sheahan
Mining Engineer

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

Office of
Executive Officer
DMEA Field Team
Region III

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

November 20, 1952

Mrs. Irene Sykes
1239 S. Beverley Glen Boulevard
Los Angeles, California

Re: Docket DMEA 2381 (Tungsten)
Contract Idm-E366
Irene Sykes Property
Esmeralda County, Nevada

Dear Mrs. Sykes:

Mr. A. C. Johnson has forwarded to us five copies of bid, dated November 12, 1952, for diamond drilling at your tungsten property in Esmeralda County, Nevada, which you received from the Continental Drilling Company and accepted on the same date. Mr. Johnson recommends that I approve the contract between you and the Continental Drilling Company.

A review of your contract with the Government for carrying out exploratory drilling on your property indicates that the price asked per foot by the Drilling Company is the same as that allowed under your exploration contract, and approval on the cost per foot basis should be granted. However, it is noted that you have agreed to guarantee the Drilling Company 1,000 feet of core drilling. I cannot approve that part of the contract as Stage I of your exploration contract calls for only 640 feet of drilling. Any drilling over and above 640 feet is dependent upon satisfactory completion of Stage I and approval by the Government, and only if the Government indicates that the results of the work under Stage I warrant undertaking work under Stage II.

If I approve the contract between you and the Continental Drilling Company as written, I would in effect guarantee the Company 1,000 feet of drilling. Obviously, I cannot do that under the terms of your exploration contract. If it is your intention to guarantee the Drilling Company 1,000 feet of drilling, it should be understood and so stated in your contract with the Drilling Company that you will pay for all drilling over and above 640 feet should the Government at the completion of Stage I of your contract decline to approve going on with Stage II. In other words, the subcontractor should be informed of the exact conditions of your

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
NOV 28 1952

exploration contract, and the reservations stated therein should be made a part of the drilling contract. Only after that is accomplished can I give further consideration to approving the drilling contract between you and the Continental Drilling Company.

Sincerely yours,

H. C. MILLER

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

Copy to: DMEA, Interior Bldg., Washington 25, D. C.
E. H. Bailey, USGS
A. C. Johnson, Reno, Nevada

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

Office of
Executive Officer
DMEA Field Team
Region III

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

August 20, 1952

Memorandum

To: George C. Selfridge, Chief, Iron and Ferro-Alloy Division, DMEA, Interior Building, Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-2381 (Tungsten); Contract Idm-E366
Irene Sykes Property, Esmeralda County, Nevada

Reference is made to your letter of August 7 addressed to Mrs. Irene Sykes at Washington, D. C., with which you handed her the original and five copies of subject contract.

The contract has been executed on the part of the Operator and one copy retained by her. Proper distribution has been made of the Field Team and Finance Office copies, and the original and two copies are returned herewith.

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

Attachment

Copy to: E. H. Bailey, USGS
A. C. Johnson, Reno (With Field Team's copy of contract)
L. L. Norvell (With Finance Office's copy of contract)

AUG 20 1952

SdS 8/25/52

FILE COPY
SURNAME:

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

August 7, 1952

M.S. in R. & R.

Mrs. Irene Sykes
Washington, D. C.

Re: Docket No. DMEA 2381 - Tungsten
Irene S. Sykes Property
Esmeralda County, Nevada
Contract Idm-X366

Dear Mrs. Sykes:

Handed you herewith are the six copies of the subject contract which you returned to this office on August 6 with a request that the contract be made in your name rather than in the partnership name. This has been done and the only other change made was that of changing 4 months to 6 months, the completion period under Article 3.

I am also returning to you as requested four copies of the report "Rock Hill Mines, General Tungsten Company" by Harley A. Sill, Consulting Engineer, which were submitted with your application for exploration assistance.

Sincerely yours,

George C. Selfridge

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

GSelfridge'lm
8/7/52

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

FILE COPY 400
SURNAME:

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

Selfridge.

Mr. J. L. Hoffland, Chief Counsel, DMEA August 6, 1952

Iron and Ferro-Alloy Division, DMEA

Rewriting of Exploration Project Contract Idm-E366
Docket No. DMEA 2381 - Tungsten
Irene Sykes Property
Esmeralda County, Nevada

Attached hereto are the six copies of the subject exploration contract. It has not been signed by Mrs. Sykes as she lacks the necessary partnership papers that indicate she is the general partner.

As discussed with you this afternoon, Mrs. Sykes wishes that the contract be drawn up solely in her name as owner rather than in the name of the partnership. We see no objection to this change as she presented a deed in her name to the claims and also a release by Mr. Thompson indicating that he had no further interest in the claims.

Will you please make the necessary change at your earliest convenience. I informed Mrs. Sykes that the contract could possibly be ready shortly before noon tomorrow. Please note that Mr. Miller changed the 30-day period in Article 3 to 60. The new copy should read 60 and it would be better to change the completion period from 4 to 6 months.

Signed tm

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

Attachments

GSelfridge'lm
8/6/52

cc: Admn. Reading File
Docket
G. C. Selfridge

Docket

Office of
Executive Officer
DMEA Field Team
Region III

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

August 4, 1952

Air Mail
Special Delivery

Mrs. Irene Sykes
c/o Mr. Ralph E. Thompson
30 Federal Street
Boston, Massachusetts

Re: Docket DMEA-2381 - Tungsten
General Tungsten Company
Rock Hill tungsten deposit
Esmeralda County, Nevada
Contract No. Idm-E366

Dear Mrs. Sykes:

In accordance with instructions given in your August 2 letter, there are attached the original and five copies of Contract Idm-E366.

The contract has been changed to give you sixty (60) days after the date of the contract in which to start operations.

Sincerely yours,

H. C. MILLER

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

Enclosure (Contract)

Copy to: DMEA, Washington, D. C.

Frank E. Johnson, Chairman
Operating Committee
Defense Minerals Exploration Adm.

FILE COPY
SURNAME

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

Department of the Interior
1AX3923 - Working Fund
DMEA - Interior

FEJohnson

August 1, 1952

N. C. MILLER
EXECUTIVE OFFICER
DMEA FIELD TEAM, REGION III
1012 FLOOD BUILDING
870 MARKET STREET
SAN FRANCISCO 2, CALIFORNIA

REURTEL DMEA DOCKET 2361. IF CONTRACT NOT SIGNED STRIKE OUT STARTING DATE AND INSERT SIXTY DAYS.

Frank E. Johnson

n. s. in R. v R.

GCSelfridge/bih
8/1/52
cc to: Docket
Admr's Reading File
Operating Committee
Messrs. Selfridge
FEJohnson

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 1 1952

JUL 31 3 17 PM '52

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SAN FRANCISCO CALIF 7-31-52 1149A

FRANK E. JOHNSON

DEFENSE MINERALS EXPLORATION ADMIN, INTERIOR BLDG., WA

RE DOCKET DMEA 2381 /TUNGSTEN/ CONTRACT IDM-E366 MRS. SYKES REQUESTED BY WIRE AMENDMENT TO CONTRACT EXTENDING STARTING DATE TO AUGUST 30 IN ORDER TO EXPEDITE PROPER SIGNATURES EARLIEST POSSIBLE DATE. SHE PLANS TO FLY TO NEW YORK THIS WEEKEND AND WILL PROBABLY BE IN WASHINGTON NEXT WEEK. CAN I ISSUE AMENDMENT TO CONTRACT NOT YET EXECUTED OR HOW SHOULD I HANDLE THE REQUEST/QM/

H C MILLER, EXEC OFCR, DMEA FLD TEAM, REG III

DMEA 2381 IDM-E366 30

AM 1151A

400

FILE COPY
SURNAME:

Selfridge
Fickes
F. Johnson

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

JUL 24 1952

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 2381 - Tungsten
General Tungsten Company
Rock Hill tungsten deposit
Esmeralda County, Nevada
Contract No. Idm-E-366

Dear Mr. Miller:

This is to acknowledge receipt of your memorandum of July 15, 1952, with attachment by Irene Sykes, concerning the signing of the subject contract.

The Government will accept Mrs. Sykes' signature as General Partner if she will furnish you proof of her status.

Sincerely yours,

7/24/52
G.P.L.

George C. Selfridge (HB)
ACTING Chairman, Operating Committee
Defense Minerals Exploration Administration

Approved:

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

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

GCSelfridge:ls 7/22/52

cc: Docket
Admn. Reading File
G. C. Selfridge
Field Team, Reg. 3
Operating Committee
D. M. Lemmon, USGS
R. W. Geehan, USBM

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

Office of
Executive Officer
DMEA Field Team
Region III

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

July 15, 1952

Memorandum

To: Frank E. Johnson, Chairman, Operating Committee, Defense Minerals Exploration Administration, Interior Building, Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 2381 (Tungsten), General Tungsten Company, Esmeralda County, Nevada

I am attaching a letter, dated July 11, from Mrs. Irene Sykes, concerning signatures required on her exploration project contract Idm-E366.

Will you kindly let me have your thoughts regarding the signing of the contract if Mr. Thompson and Mr. Payson are not available.

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

Attachment

Copy to Mrs. Irene Sykes
1239 South Beverley Glen Blvd.
Los Angeles 27, California

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
JUL 21 1952

Copy retained 400

General Tungsten Company

Mines: Rock Hill Monte Cristo Garfield

Mina, Nevada

C
O
P
Y

1239 South Beverley Glen Blvd.
Los Angeles 24, California
July 11, 1952

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

RE: Docket DMEA 2381
(Tungsten) General Tungsten
Company, Esmeralda County,
Nevada, Contract Idm-E366

Dear Mr. Miller:

I am in receipt of the exploration contract and copies as outlined in your letter of July 7. I am, of course, exceedingly pleased to have them.

I have sent the contracts to New York and Boston for the signatures of Mr. Thompson and Mr. Payson. I am afraid that Mr. Payson is in Europe and Mr. Thompson was planning an extended fishing trip to Iceland. In the event they are not available, will the Government accept my signature, as General Partner and that of Mr. Harry Lee Martin who has already signed?

I have arranged with the Decker and Palmer Drilling firm of Bishop to submit a contract for approval by your office and will ask you for an appointment as soon as the papers have been properly signed.

Sincerely yours,

/s/ Irene Sykes

FILE COPY
SURNAME:

Selfridge

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

G. C. Selfridge - Ext. 5284

Department of the Interior

Defense Minerals Exploration Administration

STRAIGHT WIRE

JULY 8, 1952

MRS. IRENE SYKES
1239 SOUTH BEVERLY GLEN BLVD.
LOS ANGELES, CALIFORNIA

CONTRACT (DMEA DOCKET 2381) AIRMAILED JULY 3 TO MR. MILLER.

C. O. Mittendorf (for)
C. O. MITTENDORF
ACTING ADMINISTRATOR, DMEA

M. S. in R. & R.

GCSelfridge:ls
7/8/52

CC: Docket 2381
Admn. Read. File
G. C. Selfridge
Audits

Ha

Docket
FILE COPY
SURNAME:

Chapman
Selfridge

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

JUL 8 -

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

Re: Docket No. DMEA 2381 - Tungsten
The General Tungsten Company
Esmeralda County, Nevada

Dear Mr. Miller:

We are enclosing the original and five copies of the above referenced exploration contract signed by this office for the Government, together with Exhibit "A" (5 pages); Annex I; Fig. 1, showing location of the property; Fig. 2, a claim map; and Fig. 4, showing approximate location of work to be done on the property.

If the terms and conditions of this contract are satisfactory to you and the Operator, all six copies should be signed by the general partner. One copy is to be given to the Operator, one copy retained by your office, and the original and three copies returned to this office.

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

No major changes have been made in the recommendations of the field team and your memorandum to Mr. Frank E. Johnson, of May 16, 1952.

The original application was for $40,000.00, but this has been reduced to $10,600.00 as a result of a conference between the Field Team and the Operator.

The time of starting the contract and the time allowable for its completion have been left blank on the contract. These are to be filled in when the contract is signed by the Operator.

Sincerely yours,

(signed) FRANK E. JOHNSON 7/3/52

Chairman, Operating Committee
Defense Minerals Exploration
Administration

Enclosures

Approved:

J. H. Hedges

Member, Bureau of Mines

T. P. Thayer

Member, Geological Survey

TLChapman'lm
6/25/52

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

Mr. G. C. Selfridge - Extension 5284

FILE COPY
SURNAME:

Selfridge.

U. S. Dept. of the Interior
Defense Minerals Exploration
Administration

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

DAY LETTER

JUNE 25, 1952

MRS. IRENE SYKES
1239 SOUTH BEVERLY GLEN BLVD.
LOS ANGELES, CALIFORNIA

CONTRACT (DMEA DOCKET NO. 2381) WILL BE MAILED H. C. MILLER, 1012 FLOOD BUILDING, 870 MARKET STREET, SAN FRANCISCO 2, CALIFORNIA, THIS WEEK FOR FINAL APPROVAL AND EXECUTION.

C. O. Mittendorf (fw) 6/25

C. O. MITTENDORF
ACTING ADMINISTRATOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

GCSelfridge:ls
6/25/52

CC: Docket DMEA 2381
Admn. Reading File
G. C. Selfridge

Sel

STANDARD FORM NO. 64

Office Memorandum • UNITED STATES GOVERNMENT

TO : Chairman, Operating Committee, DMEA DATE: June 24, 1952

FROM : Iron and Ferro-Alloy Division, DMEA

SUBJECT: Docket No. DMEA 2381 - Tungsten
The General Tungsten Company
Esmeralda County, Nevada

We are sending you the completed contract on the above with Exhibit "A"; Fig. 1, showing location of property; Fig. 2, a claim map; and Fig. 4, showing approximate location of work to be done on the property.

The original application was for $40,000.00. This has been reduced to $10,600.00 with the consent of the applicant. The contract follows closely the recommendations of the field team.

The project is for trenching and diamond drilling.

G. C. Selfridge

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

Attachments

FILE COPY
SURNAME:

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

Chairman, Operating Committee, DMEA

June 24, 1952

Chapman

Iron and Ferro-Alloy Division, DMEA

Docket No. DMEA 2381 - Tungsten
The General Tungsten Company
Esmeralda County, Nevada

We are sending you the completed contract on the above with Exhibit "A"; Fig. 1, showing location of property; Fig. 2, a claim map; and Fig. 4, showing approximate location of work to be done on the property.

The original application was for $40,000.00. This has been reduced to $10,600.00 with the consent of the applicant. The contract follows closely the recommendations of the field team.

The project is for trenching and diamond drilling.

George C. Selfridge 7/3/52

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

Attachments

TLChapman:lm
6/24/52

cc: Admn. Reading File
Docket
G. C. Selfridge
T. L. Chapman

140

FILE COPY
SURNAME:

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

June 23, 1952

n. s. in R. & R.

Memorandum

To: Acting Administrator

Through: G. C. Selfridge

From: Chief Counsel

Subject: The General Tungsten Company - Docket No. DMEA-2381

There is attached in satisfactory legal form for execution a contract covering the subject project.

It is not too clear from the documents in the file that the applicant, General Tungsten Company has title to the nine mining claims involved. Therefore, it is suggested that before this contract is delivered to the applicant, evidence satisfactory to the Field Attorney be furnished that the applicant has good title to these claims and that they are not owned by any other individual, partnership or corporation, and particularly not by Irene Sykes as an individual or by Cobalt Tungsten Associates unless that firm is actually the applicant under an earlier different name.

J. L. Hofflund

J. L. Hofflund
Chief Counsel

Attachment

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

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

June 23, 1952

Memorandum

To: Acting Administrator

Through: G. C. Selfridge

From: Chief Counsel

Subject: The General Tungsten Company - Docket No. DMEA-2381

There is attached in satisfactory legal form for execution a contract covering the subject project.

It is not too clear from the documents in the file that the applicant, General Tungsten Company has title to the nine mining claims involved. Therefore, it is suggested that before this contract is delivered to the applicant, evidence satisfactory to the Field Attorney be furnished that the applicant has good title to these claims and that they are not owned by any other individual, partnership or corporation, and particularly not by Irene Sykes as an individual or by Cobalt Tungsten Associates unless that firm is actually the applicant under an earlier different name.

J. L. Hofflund
J. L. Hofflund
Chief Counsel

Attachment

FILE COPY 400
SURNAME:

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

Chapman
Selfridge.

John L. Hofflund, Chief Counsel, DMEA

May 26, 1952

Iron and Ferro-Alloy Division, DMEA

Contract for review and final preparation
Docket No. DMEA 2381 - Tungsten
The General Tungsten Company
Esmeralda County, Nevada

A rough draft of the contract is attached hereto, together with areal map showing location of property, claim map and plan showing location of the proposed work.

The amount of the loan is $10,600.00, of which the Government's share is $7,950.00.

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

Attachments

cc: Admn. Reading File
Docket
G. C. Selfridge
T. L. Chapman

TLChapman'lm
5/26/52

General Tungsten Company
Exploration Project Contract
Rock Hill Mine
Esmeralda County, Nevada
Docket No. DMEA 2381

Exhibit "A"

Description of Work

Time Schedule
Months

Stage I

0 - 2

The project consists of 2 trenches and 5 diamond drill holes. Fig. 4 shows approximate location of trenches and drill holes. The exact location shall be designated by the Operator subject to approval by the Government.

The 2 trenches shall crosscut the mineralized zone to show trend, width and contacts. This work shall be done with hand tools, if necessary, using a few single jack holes to define the contacts.

The diamond drill shall be located approximately 70 feet easterly from No. 1 outcrop of the mineralized area and the holes shall be drilled at right angles to the contacts and at 50 foot intervals.

The diamond drill holes shall be of AX size and have an approximate dip and length as tabulated below:

Hole No.	Dip from Horizontal	Length	Vertical depth at which the Hole cuts the mineralized Zone
1	- 40°	105'	61'
2	- 46°	115'	76'
3	- 51°	125'	90'
4	- 56°	140'	108'
5	- 60°	155'	126'
Total hole length		640'	

Stage II

2 - 3 This work will be undertaken only after the completion of Stage I to the satisfaction of and approval by the Government and only if the Government indicates the results of the work under Stage I warrants undertaking the work under Stage II.

Fig. 4 shows the approximate location of trenches and drill holes. The exact location to be disignated by the Operator subject to approval by the Government.

The two trenches shall crosscut the mineralized zone to show trend, width and contacts. This work shall be done with hand tools, if necessary, using a few single jack holes to define the contacts.

The diamond drill shall be located approximately 70 feet southerly from the No. 2 outcrop of the mineralized area and the holes shall be drilled at right angles to the contacts, at 50 foot intervals.

The diamond drill holes shall be of AX size and have an approximate dip and length as tabulated below:

Hole No.	Dip from Horizontal	Length	Vertical depth at which the Hole cuts the mineralized Zone
6	- 40°	105'	61'
7	- 51°	125'	90'
8	- 60°	155'	126'
Total length		385'	

All diamond drill cores from the mineralized zone shall be split and sent to a custom assayer to be mutually agreed upon. The balance of the core shall be retained by the Operator.

Estimated Costs of the Project
*Indicates allowable maximum

(1) Independent Contracts

Stage I

640 feet of diamond drilling @$7.00/Ft.		$4,480.00*

Stage II

385 feet of diamond drilling @$7.00/Ft.		2,695.00*

All sub-contracts are subject to prior written approval by the Government.

(2) Labor, Supervision, Consultants

Stage I

1 - Supervisor-geologist @$500.00/Mo, 2 months	1,000.00*	
1 - Miner and general utility man, $14.00/day, 40 days	560.00	1,560.00*

Stage II

1 - Supervisor-geologist @$500.00/Mo., 1 month	500.00*	
1 - Miner and general utility man, $14.00/day, 20 days	280.00	780.00*

Note: The supervisor-geologist shall make a geological map of the area, log the diamond drill holes and make monthly reports.

(3) Operating Materials and Supplies

Stage I

Tools, powder, fuse, caps, gasoline, oil and miscellaneous	100.00

Stage II

Tools, powder, fuse, caps, gasoline, oil and miscellaneous	50.00

(4) Operating Equipment

Stage I

To be purchased

None

To be rented

1 - Pickup truck @$100.00/Mo., (includes upkeep), 2 months	200.00

To be furnished by the Operator

None

Stage II

To be purchased

None

To be rented

1 - Pickup truck @$100.00/Mo. (includes upkeep), 1 month	100.00

To be furnished by the Operator

None

(5) Rehabilitation and Repairs

Stages I and II

None

(6) New Buildings, Improvements and Installations

Stages I and II

None

(7) Miscellaneous

Stage I

Sample sacks	10.00
Assaying, 20 samples @$4.00 each	80.00

Core boxes	60.00	
Compensation Insurance, Social Security, Unemployment Insurance, etc.	150.00	300.00
Stage II		
Assaying, 10 samples @$4.00 each	40.00	
Core boxes	35.00	
Compensation Insurance, Social Security, Unemployment Insurance, etc.	75.00	150.00
(8) **Contingencies**		
Stage I		120.00
Stage II		65.00
TOTAL COST OF STAGE I	$6,760.00	
TOTAL COST OF STAGE II	3,840.00	$10,600.00
GOVERNMENT PARTICIPATION, 75 PERCENT		$ 7,950.00

CLAIMS OF GENERAL TUNGSTEN COMPANY

ANNEX I

Surveyed claims tied into corner common to Sections 34 and 35, T. 4 N., R. 36 E., and Sections 2 and 3, T. 3 N., R. 36 E., Mount Diablo Meridian are as follows:

Name of Claim	Located
Half Moon No. 2	May 30, 1951
Half Moon No. 3	July 14, 1951
Half Moon No. 1	Sept. 11, 1951
Half Moon Tungsten	Sept. 11, 1951
Half Moon No. 4	Oct. 9, 1951
Half Moon Fraction	----

Unsurveyed claims as follows:

Half Moon No. 5

Rock Hill

Rock Hill No. 1

All shown on Fig. 2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION

WASHINGTON 25, D. C.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 20 1952

Office of
Executive Officer
DMEA Field Team
Region III

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

May 16, 1952

Memorandum

To: Frank E. Johnson, Chairman, Operating Committee, Defense Minerals Exploration Administration, Washington, D. C.

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-2381 (Tungsten) - General Tungsten Company, Rock Hill Tungsten Deposit, Esmeralda County, Nevada.

Reference is made to your subject letter dated May 5.

Our Reno mining engineers report that the shaft sinking as proposed by you would not give the information that would be obtained by diamond drilling. To sink a shaft on the property would cost approximately $50 a foot. The holes that were contemplated in the exploration program would explore the mineralized ore zone from 90 to 350 feet vertical distance below the surface. To do this amount of shaft sinking would be prohibitive.

Our Mr. Johnson says that he is in accord with the program that has been laid out for the exploratory work by the engineer of the Bureau of Mines and the geologists of the U. S. Geological Survey. For this work he gives the following costs:

1,000 feet of diamond drilling at $7.00 a foot	$ 7,000
3 months supervision - mining engineer or geologist at $500 a month	1,500
4 hand trenches to expose structure	500
Contingencies	1,000
Total	$10,000

The location of the diamond drill holes will depend on the results of trenching and geologic mapping to be made at the applicant's expense. The drilling probably should amount to about 600 feet in Area One and 400 feet in Area Two.

Mr. Johnson writes, also, that there would be no point in discussing the exploration program with the applicant again, as she does not have any knowledge of mining.

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

Copy to E. H. Bailey, USGS

400

FILE COPY
SURNAME:

Selfridge

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

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

MAY 5 1952

Re: Docket No. DMEA 2381 - Tungsten
General Tungsten Company
Rock Hill Tungsten Deposit
Esmeralda County, Nevada

Dear Mr. Miller:

This is to supplement our conversation of May 1 regarding the field team report on the subject property, which recommends exploration and which did not furnish the cost information necessary to draw up a contract.

Since the strike length of area No. 1 is relatively limited, and since it is difficult to secure a diamond drilling contract on limited footage, we are wondering whether or not consideration should be given to sinking a small shaft directly on the ore showing.

This alternative might be discussed with the applicant, and then submit the details necessary to draw up Exhibit "A", based on whatever decision is reached during the conference with the applicant.

GCSelfridge'lm
5/2/52

Sincerely yours,

(Signed) FRANK E. JOHNSON

(NB)

Chairman, Operating Committee
Defense Minerals Exploration
Administration

Approved:

W. H. Hedges

Member, Bureau of Mines (NB)

D. M. Lemmon

Member, Geological Survey
(NB)

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

IN REPLY REFER TO:

G-MD-DML

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

April 22, 1952

Memorandum

To: George C. Selfridge, DMEA

From: D. M. Lemmon, USGS

Subject: Field Report DMEA 2381 - Tungsten
Rock Hill and Half Moon Tungsten claims
General Tungsten Co.
Sec. 34, T. 4 N., R. 36 E.
Esmeralda County, Nevada

This field report, dated March 13, 1952, written by Russell R. Trengove, U.S.B.M. and Robert G. Reeves, U.S.G.S., is based on brief examinations in November 1951 and February 1952.

The Field Team recommends a program of hand trenches, geologic mapping, and core drilling 1,000 feet, at a total cost not to exceed $10,000. The examining engineers took 7 samples, 2 of which may be ore. They copied the applicant's geologic map without doing additional geologic work needed to interpret the geologic setting. Costs and adequate descriptions of the work to be done are not given.

Neither the applicant's geologist (Dudley Davis) nor the Field Team has done sufficient geologic work upon which to base a drill program. It is doubtful if sufficient geologic information can be developed by either of these sources to justify drilling.

The Field Team recommendation for core drilling appears premature. I suggest that a modest program of surface trenching followed, by sinking of open pits in ore, is the maximum exploration warranted. The applicant might have undertaken such a program to good advantage, with shipment to the Pine Creek mill to help defray expenses. Some doubt exists whether a suitable DMEA project can be drawn up at a cost commensurate with size of expected mineralization because the applicant is not versed in mining and must hire consultants at high cost.

DM Lemmon

Chrono retained 400

IN REPLY REFER TO:

G-MD-DMA

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

April 22, 1952

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From: D. M. Lemmon, USGS

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D M Lemmon

IN REPLY REFER TO:

G-MD-DML

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

April 22, 1952

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D M Lemmon

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

Office of
Executive Officer
DMEA Field Team
Region III

APR 15 1952

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

April 11, 1952

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-2381 (Tungsten), General Tungsten Company, Rock Hill Tungsten Deposits, Esmeralda County, Nevada (Mrs. Irene Sykes)

Reference is to your subject "Review of Application for Exploration Assistance," dated March 13, 1952.

Attached are four copies of a report "DMEA-2381, Rock Hill Tungsten Deposits, Esmeralda County, Nevada," by Russell R. Trengove, Mining Engineer, U. S. Bureau of Mines, and Robert G. Reeves, Geologist, U. S. Geological Survey, dated March 13, 1952.

According to the recommendation of the engineer and the geologist, a limited exploration program, costing not more than $10,000, is warranted on the property. The work should consist of some further hand trenching and diamond drilling. The trenching would be for the purpose of indicating the lateral continuity of the tungsten lens, and the drilling would be for the purpose of determining the downward extension of the mineralized section found on the surface.

The docket file is returned herewith.

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

Attachments

CC E. H. Bailey, U.S.G.S.

UNITED STATES
DEPARTMENT OF THE INTERIOR
OSCAR L. CHAPMAN, SECRETARY

DEFENSE MINERALS ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

DMEA-2381, Rock Hill Tungsten Deposits

Esmeralda County, Nev.

Russell R. Trengove, Mining Engineer
U. S. Bureau of Mines

Robert G. Reeves, Geologist
U. S. Geological Survey

March 13, 1952

Reviewed by
DMEA OPERATING COMMITTEE
4-18-52
(date)

DOCKET DMEA-2381

ROCK HILL TUNGSTEN DEPOSITS
Esmeralda County, Nev.

SUMMARY, CONCLUSIONS, and RECOMMENDATIONS

An engineer[1] of the Bureau of Mines examined the Rock Hill tungsten deposits while exploration was in progress, in November 1951. At that time it was named Cobalt-Tungsten Associates Mine. It was again examined by Bureau engineers[2] and a geologist[3] of the U. S. Geological Survey in February, 1952.

The purpose of the examination was to determine the probable grade and extent of the scheelite mineralization in considering an application for a Government exploration loan amounting to $40,000 with 75 percent Government participation.

The ensuing report notes the location and physical features, the property and ownership, description of the ore and ore deposits, and the geology.

There has been no production to date.

Areas numbers 1 to 5 (figures 2 and 3) were examined. Areas 1, 2, and 4, where scheelite mineralization in place was exposed, were sampled. Analyses were 0.92% WO_3, 0.13% WO_3, and less than 0.01% WO_3, respectively.

Because no effort has been made to ascertain the grade and extent of the deposit at depth, it is recommended that a loan be granted for a small diamond drill exploration program, not to exceed $10,000. Figure 3 shows location of mineralized areas. Areas 1 and 2 have been

1/ Russell R. Trengove.
2/ Russell R. Trengove and John D. Warne.
3/ Robert G. Reeves.

selected for the drilling program.

INTRODUCTION

An application for Government loan under Sec. 202 of the Defense Production Act of 1950 was made by Irene Sykes for the General Tungsten Company on December 31, 1951.

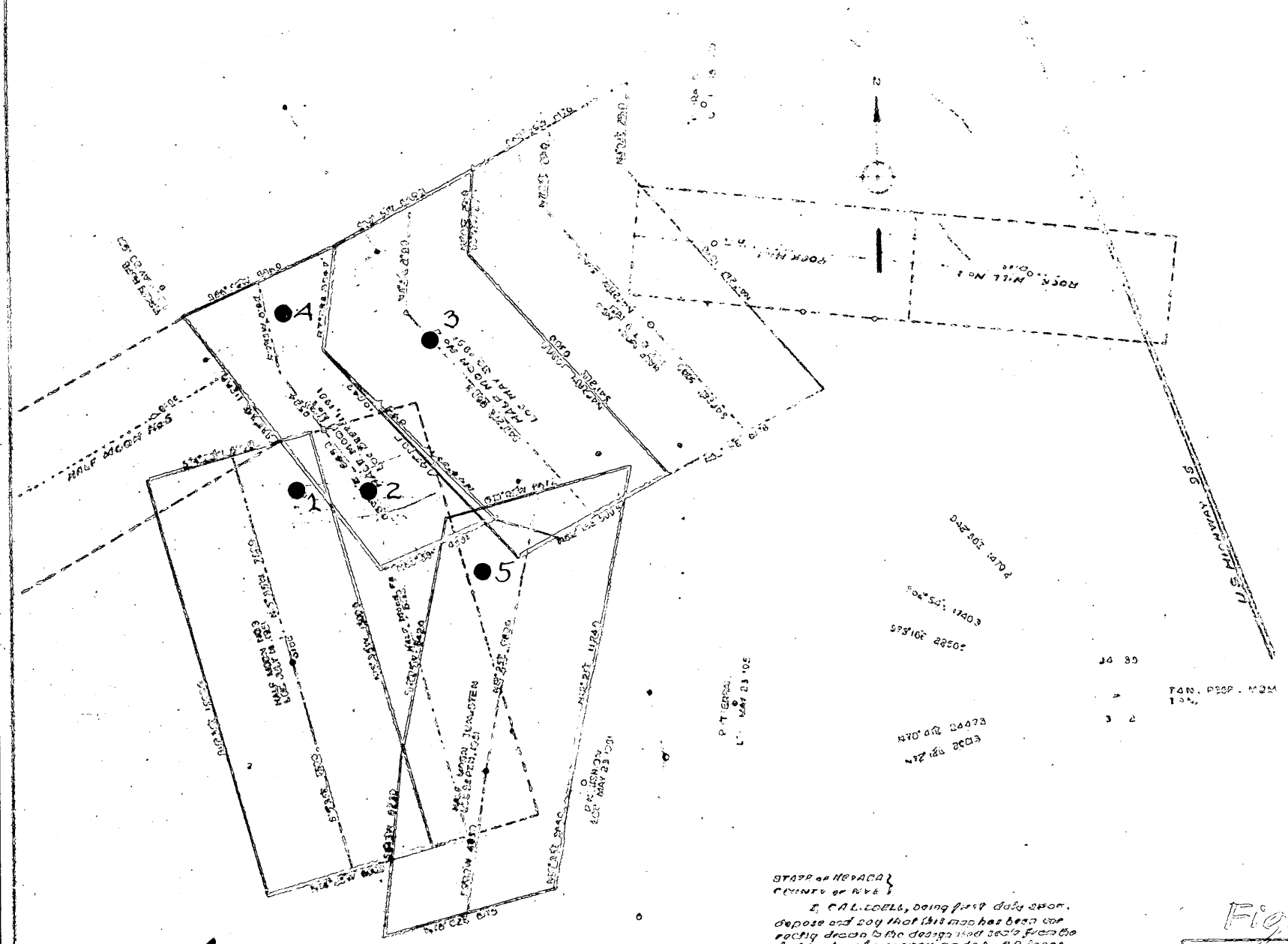
A preliminary examination was made in November 1951 by a Bureau engineer. At that time, the property was known as the Cobalt-Tungsten Associates Mine and exploration by bulldozer trenches was in progress. This work was terminated in December 1951.

The property was again examined by engineers of the Bureau of Mines and a geologist of the U. S. Geological Survey in February 1952.

LOCATION AND PHYSICAL FEATURES

The Rock Hills tungsten deposit (fig. 1) is located in sec. 34, T. 4 N., R. 36 E., M.D.B.&M., north of Columbus Salt Marsh and in the southeast portion of the Candaleria Hills area. The property is situated in an area of moderate relief; elevations range from 4,512 feet in the Columbus Salt Marsh to 5,100 feet on the crest of the ridge. The McCoy tungsten property is situated on the west side of this ridge and the Rock Hills tungsten deposit adjoins the McCoy property and is on the east slope of the ridge. To reach the property, follow U. S. Highway 95 south from Mina, Nev., a distance of 20.6 miles. The property can be seen from the highway at this point. It lies about one mile west of the highway.

Water can be obtained by sinking wells in the Columbus Salt Marsh. There is no transmitted power near the property. The nearest source of


1
2
3
4
5
HALF MOON NO 5
ROCK HILL NO 1
U.S. HIGHWAY 95
P.T. BRAD.
MAY 23 1905
FAN. PROP. MOM
STATE OF NEVADA
COUNTY OF NYE
E. CALDWELL, being first duly sworn, depose and say that this map has been correctly drawn to the design and scale from the field notes of a survey made by A.O. Jones, under my supervision on October 1904 that it truly and correctly shows the position of of the lode claims as staked upon the ground
E. Caldwell
Mineral Surveyor for Nevada
Fig. 7.
PROPERTY OF
IRENE & SYKES
NYE NEVADA

transmitted power would be at the Sodaville mill, 18 miles distant.

The nearest shipping point is Mina, Nev., which is the terminus of a branch line of the Southern Pacific Railroad.

Mine supplies can be obtained in Reno, Nev., 192 miles distant.

There is very little snowfall in the area, so the mine could be operated the year around. There is no mine timber available on the property or the immediate vicinity.

There are no structures on the property. Equipment owned by the General Tungsten Company consists of one portable power unit for the ultra-violet lamp. Exploration was conducted with rental equipment owned by Mr. Hayden W. Church, 3149 West 152 Place, Los Angeles, Calif.

PROPERTY AND OWNERSHIP

Tungsten was first discovered east of the Rock Hill tungsten claims by a Mr. Woodward, early in 1951. G. A. Peterson discovered tungsten on the Rock Hill area and staked five lode claims during the summer of 1951. Irene Sykes obtained a lease and option on the Peterson group and conducted the exploration under the firm name of Cobalt-Tungsten Associates. She also located the Half Moon Claim No. 4 and the Half Moon Fraction. In December 1951, she purchased the Peterson group of claims; the Half Moon Tungsten and the Half Moon Tungstens No.s 1, 2, and 3 and changed the firm name to the General Tungsten Company.

Irene Sykes, a general partner, in the new company, made the application for Government aid on December 31, 1951.

GEOLOGY

The rocks of the area are interbedded sandstone, limy slate, and impure limestone and dolomite, which have been locally metamorphosed by an intrusion of granitic rocks. The age of the sedimentary rocks is thought by Ferguson and Muller[4] to be of Ordovician, while the intrusive is believed by them to be Jurassic in age. The sediments are folded, cut by numerous quartz veins, and in many places highly contorted. Davis[5] believes the quartz veins genetically related to the granitic intrusion, and that granite may underlie the sediments at a depth of less than 800 feet. The areal distribution of the rocks, some of the structure of the sediments, and the attitudes of the quartz veins are shown by Davis[6] on a map accompanying his report submitted by the applicants. A copy of this map, prepared by the Bureau of Mines, appears as Figure 3 of this report. As a result of the field examination, it is believed that Davis' report and map give an accurate description of the geology. The cross sections accompanying his report, however, are not considered to be realistic.

ORE DEPOSITS

Tungsten, mainly as scheelite, but with very minor hubnerite, occurs disseminated in tactite, which is believed to have been formed by the metamorphism of the limy slate horizons of the sedimentary sequence. The many quartz veins contain little or no tungsten, but where they cut favorable beds, the surrounding rock contains some

---

4/ Ferguson, H. C., and Muller, S. W., Structural Geology of the Hawthorne and Tonopah quadrangles, Nevada: U. S. Geol. Surv. Prof. Paper 216, pp. 45-49, pl. 1, 1949.

5/ Davis, D. L., Report on the Cobalt-Tungsten Associates Mine, Esmeralda Co., Nevada: Unpublished manuscript, 1951, accompanying application.

6/ Idem

scheelite. There are five principal mineralized areas, as shown on the accompanying map (Fig. 3). Of these, only area No. 1 is deemed worthy of further exploration.

In area No. 1, a narrow, north-south trending ore zone has been exposed, near its southern end, by a small cut. The ore zone consists of two parts; an east one 2 feet wide, and a west one 3 feet wide, separated by a barren horse $2\frac{1}{2}$ feet wide. The mineralization appears to have followed bedding, which in this area dips to the east. The ore is enclosed in a hard, dark green tactite. The ore and barren tactite are nearly indistinguishable without the use of ultraviolet light. Lenses of black, dolomitic limestone are found locally in the enclosing rock near the contact with the ore. Neither the length nor the depth of the ore shoot has been delineated by physical exploration. Lamping along the strike of the ore, for well over a hundred feet, discloses considerable mineralized float, as well as a few small mineralized outcrops. Samples cut from the east part of the ore zone assay 0.88% WO_3, while those from the west assay 0.94% WO_3.

Area No. 2 comprises a weakly mineralized zone, 300 feet east of Area No. 1. A mineralized zone, 19 feet wide, has been exposed by a bull-dozer cut. The scheelite bearing material is surrounded by barren tactite, from which it is distinguished with difficulty. A sample across the 19 feet assays 0.13% WO_3. A sample from a small ore pile, reported by the owner to consist of material hand-sorted under ultraviolet light from the 19-foot mineralized zone, assays 0.31% WO_3, showing that this method of concentration may be employed to produce an

acceptable grade of material. A sample of the reject pile assayed 0.02% WO_3.

In area No. 3, about 300 feet north of area No. 2, a small amount of scheelite occurs across a width of less than 10 feet. It was not sampled.

In area No. 4, northeast-trending tactite beds dip steeply to the east. Under ultra-violet light, a small amount of scheelite was seen across a width of 20 feet, however, a sample across that width assayed less than 0.01% WO_3. One lens, 2 feet wide and less than 10 feet long in the eastern corner of the area, appeared to contain scheelite in substantially larger amounts, and was sampled. The sample across the 2 feet of ore assayed 0.50% WO_3.

Area No. 5 shows minor scheelite distributed over a large area. No ore was found, and the area was not sampled.

DATA REGARDING REQUEST FOR LOAN

Irene Sykes informed the Bureau engineer that she originally had $26,000 from her backers to explore the Black Hills tungsten property. A proposed project on her property has been discussed in great detail with engineers of the Bureau of Mines and she is in favor of a limited diamond drilling program not to exceed $10,000 to explore the downward extension of the outcrops. She has informed the Bureau that she is financially able to pay her 25 percent on a project of this size. At this meeting, she stated that she was not well versed in mining and would employ a mining engineer or a geologist to log the diamond drill cores and oversee the drilling operations. In connection with this

work, the engineer or geologist in charge of the work would make a detailed geological map of mineralized areas on a 50-foot scale.

GEOLOGIST'S CONCLUSIONS

The occurrence of tungsten minerals is widespread; however, ore has been found in only one place on the property. Very little has been done to explore the one ore occurrence, either to ascertain its length or its downward extension. It is believed that further limited exploration would be advisable on area No. 1 in order to ascertain the downward and lateral extent of the ore. Small surface cuts along the strike of the ore would be very helpful in determining its length and width at other points. Should the surface cuts indicate a lateral continuity of 50 feet or more, thus warranting further exploration, diamond drilling would appear to be the most feasible method of determining the downward extension. Because of the complexity of folding, it is recommended that the location, direction and inclination of the diamond drill holes be deferred until larger scale geologic mapping or further geologic study of the principal mineralized zone is accomplished.

ENGINEER'S CONCLUSIONS

The property, as a whole, appears to be speculative. However, the structure offers a favorable possibility for making a significant mineral discovery.

Other tungsten deposits were equally discouraging until the outcrops were explored 20 to 30 feet below the surface. They are now producing commercial ore.

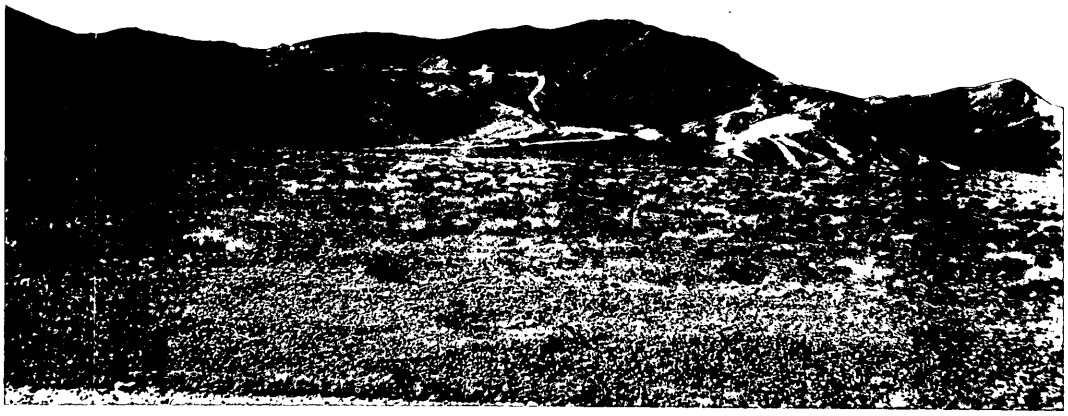
Because no effort has been made to ascertain the grade and extent of the Rock Hill tungsten deposit at depth, it is recommended that a loan be granted for a limited diamond drill exploration program, not to exceed $10,000.

JOINT CONCLUSIONS

It is recommended by the examining engineer and geologist that a limited exploration program be undertaken to ascertain the lateral and downward extensions of the ore body in area No. 1.

The exploration program should consist of surface trenches and diamond drilling. Two or three shallow short trenches, dug by hand, should be sufficient to determine the length of the ore shoot. Diamond drilling in the amount of 1,000 feet should give sufficient information on the depth of the ore body. Coupled with the hand-trenching and diamond drilling should be large-scale geologic mapping of the principal ore zone, accomplished by the engineer or geologist supervising the drilling. The whole program should not exceed $10,000, $7,500 of which is the Government's share, while the applicant furnishes $2,500.

Looking west toward deposit.



Looking west from U.S. Highway 95.
(Note wagon drill on McCoy Tungsten
on skyline at right.)

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

MAR 13 1952

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

Gordon Selfridge
Geehan

Dear Sir:

We attach "Review of Application for Exploration Assistance" on:

Applicant General Tungsten Company, c/o Mrs. Irene Sykes

Docket No. 2381

Commodity Tungsten

Amount $ 40,000.00

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:

P. N. Hedges
Member, Bureau of Mines

T. P. Layer
Member, Geological Survey

Defense Minerals Administration

Review of Application for Exploration Assistance

Docket No. DMEA 2381

Commodity Tungsten

Total Amount $40,000.00

Govt. Participation 75%

1. Name and Address of Applicant General Tungsten Company
c/o Mrs. Irene Sykes
Mina, Nevada

2. Location of Property Esmeralda County, Nevada

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

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? Owners

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? No

a) MF-201? _____

b) MF-202? _____

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)* Unknown

e) Power (question 13)* Yes

Is a field check needed on any of these points? Should be investigated

9. Does the experience of the applicant appear to be adequate to assure that he can properly conduct the proposed project? (question 4)* Unknown

_____

Is a field check needed on this point? Yes

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? Yes

d) Are the cost estimates detailed? Yes

Can they be summarized, as on page 2 of Procedural Instruction 5-A, from the available data? ---- If so, attach a draft.

e) Are the cost estimates reasonable? Many items do not apply to exploration.

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? Sufficient sampling, assaying and geological mapping to evaluate the property. If examination is favorable, suggest that applicant prepare a reasonable and definite plan for exploration. Many of the items listed in applicant's costs will not be allowable for exploration. Investigate competence of applicant to manage the project. Let us have your opinion on necessity of repairs on road at a cost of $1,000.00. Investigate need of a general superintendent and foreman to handle 4 men.

Reviewed by: Glenn G. Gentry

Date Feb. 21, 1952

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

MAR 13 1952

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

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Amount $ 40,000.00

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Sincerely yours,

(signed) FRANK E. JOHNSON

Chairman, Operating Committee
Defense Minerals Exploration
Administration

APPROVED:

J. H. Hedges
Member, Bureau of Mines

T. P. Thayer
Member, Geological Survey

Defense Minerals Administration

Review of Application for Exploration Assistance

Docket No. DMEA 2381

Commodity Tungsten

Total Amount $40,000.00

Govt. Participation 75%

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c/o Mrs. Irene Sykes
Mina, Nevada

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If not, application will be rejected.

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Mines or Survey reports, etc., do you rate chances:

a) Good

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? Owners

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*question numbers are those of MF-103

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a) Available manpower Yes

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(question 14 plus general knowledge of availability)*

c) Accessibility (question 12)* Yes

d) Water (question 13)* Unknown

e) Power (question 13)* Yes

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9. Does the experience of the applicant appear to be adequate to assure that he can properly conduct the proposed project? (question 4)* Unknown

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Is a field check needed on this point? Yes

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_____

c) Is the proposed work "exploration" under the definition of Section 8, MO-5? Yes

If not, what part of it is? _____

_____

_____

_____

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d) Are the cost estimates detailed? Yes

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f) Should more information be requested from applicant? Yes

g) Is a field examination necessary to complete Exhibit A? Yes

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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? Sufficient sampling, assaying and geological mapping to evaluate the property. If examination is favorable, suggest that applicant prepare a reasonable and definite plan for exploration. Many of the items listed in applicant's costs will not be allowable for exploration. Investigate competence of applicant to manage the project. Let us have your opinion on necessity of repairs on road at a cost of $1,000.00. Investigate need of a general superintendent and foreman to handle 4 men.

Reviewed by: Glenn G. Gentry

Date Feb. 21, 1952

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

MAR 13 1952

Original Signed by: Gentry Delphey Gleason

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 General Tungsten Company, c/o Mrs. Irene Sykes

Docket No. 2381

Commodity Tungsten

Amount $ 40,000.00

Please expedite consideration of the application with particular reference to the points raised in the attached "Review".

Sincerely yours,

(signed) FRANK E. JOHNSON (JB)

Chairman, Operating Committee
Defense Minerals Exploration
Administration

F.N. 3-13-52

APPROVED:

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

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

Defense Minerals Administration

Review of Application for Exploration Assistance

Docket No. DMEA 2381

Commodity Tungsten

Total Amount $40,000.00

Govt. Participation 75%

1. Name and Address of Applicant General Tungsten Company
c/o Mrs. Irene Sykes
Mina, Nevada

2. Location of Property Esmeralda County, Nevada

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

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? Owners

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? No

a) MF-201? _____

b) MF-202? _____

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)* Unknown

e) Power (question 13)* Yes

Is a field check needed on any of these points? Should be investigated

9. Does the experience of the applicant appear to be adequate to assure that he can properly conduct the proposed project? (question 4)* Unknown

_____

Is a field check needed on this point? Yes

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? Yes

d) Are the cost estimates detailed? Yes

Can they be summarized, as on page 2 of Procedural Instruction 5-A, from the available data? ---- If so, attach a draft.

e) Are the cost estimates reasonable? Many items do not apply to exploration.

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? Sufficient sampling, assaying and geological mapping to evaluate the property. If examination is favorable, suggest that applicant prepare a reasonable and definite plan for exploration. Many of the items listed in applicant's costs will not be allowable for exploration. Investigate competence of applicant to manage the project. Let us have your opinion on necessity of repairs on road at a cost of $1,000.00. Investigate need of a general superintendent and foreman to handle 4 men.

Reviewed by: Glenn G. Gentry

Date Feb. 21, 1952

FILE COPY
SURNAME:

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

MAR 13 1952

Selfridge
Sylvan
Thayer
Helgeson
Johnson

Mrs. Irene Sykes
General Tungsten Company
Mina, Nevada

Re: Docket No. DMEA 2381X - Tungsten
Half Moon and Rock Hill Groups of
9 Claims
Esmeralda County, Nevada

Dear Mrs. Sykes:

Your application for assistance in exploring the Half Moon and Rock Hill groups of 9 claims in Esmeralda County, Nevada, Docket No. DMEA 2381X, 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 your project. Any assistance that you can give the field team during the examination will be appreciated.

Sincerely yours,

C. O. Mittenderf (fw) J.N. 3-13-52

Acting Administrator
Defense Minerals Exploration
Administration

GGGentry:lm
2/21/52

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

IN REPLY REFER TO:

G-MD-DML

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
FEB 20 1952

February 19, 1952

Memorandum

To: George C. Selfridge, DMEA

From: D. M. Lemmon, U.S.G.S.

Subject: Exploration application $40,000 DMEA 2381 - Tungsten
General Tungsten Co.
Mina, Nevada

Property: Half Moon and Rock Hill Groups of 9 claims
Sec. 3, T. 3 N., R. 36 E. and Sec. 34, T. 4 N., R. 36 E.
East end of Candelaria Hills
Esmeralda County, Nevada

The General Tungsten Co. (a limited partnership among Ralph E. Thompson, Charles S. Payson, Harry Lee Martin, and Irene Sykes (general partner) holds a group of claims adjoining the McCoy claims on the east. The McCoy claims, owned by the California Tungsten Corporation, were examined briefly by D. M. Lemmon and P. C. Bateman in October 1951. The General Tungsten claims have not been examined by the Geological Survey.

On the McCoy claims, scheelite is irregularly distributed in hornfels, with no clearly evident controls such as bedding, fractures, or igneous contacts. Some ore of good grade is present, probably only in small tonnage. The claims are accessible to heavy equipment, and can be tested most readily by open pits in the mineralized areas and ore shipments to the Pine Creek mill of U. S. Vanadium Co., about 108 miles distant.

The mineralization on the General Tungsten claims is presumably similar to that on the McCoy claims, and should likewise be investigated by making shipments to Pine Creek from open pit workings. Returns from shipments will pay at least part of the exploration cost.

The suggestion made by Dudley Davis that high grade ore might be found at depth along a hypothetical granite contact is of doubtful merit.

Recommendation:

In the absence of adequate information in government files about the General Tungsten claims, it is recommended that the docket be referred to the Field Team for examination of the property. If the Field team considers exploration warranted, a reasonable plan of exploration should be worked out with the applicant. Information is needed about the competence of the applicant.

Dwight M. Lemmon

IN REPLY REFER TO:

G-MC-DHL

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

February 19, 1952

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To: George C. Selfridge, DMEA

From: D. M. Lemmon, U.S.G.S.

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DM Lemmon

DMLemmon:gt

IN REPLY REFER TO:

G-MD-DML

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

February 19, 1952

Memorandum

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From: D. M. Lemmon, U.S.G.S.

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General Tungsten Co.
Mina, Nevada

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Recommendation:

In the absence of adequate information in government files about the General Tungsten claims, it is recommended that the docket be referred to the Field Team for examination of the property. If the Field team considers exploration warranted, a reasonable plan of exploration should be worked out with the applicant. Information is needed about the competence of the applicant.

Don Lemmon

DMLemmon:gt

EXPLORATION

Subject: DMEA-2381
Re: Exploration Loan
Rock Hill Mines
February 19, 1952

Mrs. Irene Sykes, General Partner
General Tungsten Company
Mina, Nevada

My dear Mrs. Sykes:

This will acknowledge receipt of your application dated December 31, 1951 for a loan under the Defense Production Act of 1950.

Your application was assigned Docket Number DMEA-2381 and referred to the Iron and Ferro-Alloy Division.

Kindly refer to DMEA-2381 in any future correspondence relating to your application.

Sincerely yours,

R. E. ADAMS

Robert E. Adams
Acting Administrative Officer

7862

DMEA-2381

OFFICE OF THE ADMINISTRATOR

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION

WASHINGTON 25, D. C.

Office of
Executive Officer
DMEA Field Team
Region III

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

February 14, 1952

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Application for Exploration Loan (Tungsten) - General Tungsten Company, Mina, Nevada -- Mrs. Irene Sykes

Yesterday Mrs. Irene Sykes of Mina, Nevada left with us four copies of her application for an exploration loan covering her tungsten property in Esmeralda County, Nevada, together with supporting data and four copies of MF-100 form,General Technical Data.

In accordance with DMEA Memorandum No. 2, one complete set of the application papers and forms has been retained in this office for our examining engineers who will be instructed to examine the property at such time as they are in the area.

The remaining three copies of the application are being sent to you attached herewith. Included in each set of papers are the following:

1. Form MF-103, Application for Aid for an Exploration Project, dated December 31, 1951
2. Form MF-100, General Technical Data, dated December 31, 1951
3. Report: Rock Hill Mines, General Tungsten Co., by Harley A. Sill
4. Drawings of tentative 100-ton mill prepared by M. George Bissell
5. Copy of letter dated September 15, 1951, U. S. Vanadium Co. to Mrs. Irene Sykes
6. Copy of letter dated September 24, 1951, U. S. Vanadium Co. to Mrs. Irene Sykes

Defense Minerals Administration
FEB 18 1952

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

Attachment

Copy to E. H. Bailey

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-2381
Metal or Mineral
Date Received 2-18-52
Amount $
Participation (Government %)

GENERAL TUNGSTEN COMPANY
MINA, NEVADA

Name and address of applicant

Date 12/31/1951

If you have already filed MF-100, give date filed Attached, type of assistance requested Exploratory loan,

DMA Docket Number (if available)

INSTRUCTIONS

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

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

   (*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. Owner

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

   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. No liens or encumbrances

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

   (*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.
   See engineering reports attached - to be returned.

FEB 18 1952

16—64067-2

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.

GENERAL TUNGSTEN COMPANY
(Name of company)

By Jane Sykes
(Signature of authorized official)

12/31/1951
(Date)

General Partner
(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

Color Co-ordinators, Ltd.

QUESTION #3 Form MF-103

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

For a total estimated cost of $40,000.00 we propose to remove overburden with bulldozer and skiploader from five separate areas, noted on the attached topographical map as Numbers 1 - 2 - 3 - 4 - and 5, to expose bedrock where outcrops and previous explorations have indicated probable existing ore bodies. We will then explore all lenses giving favorable evidence of commercial ore to determine length and depth of each area. We also plan to drive drifts at the base of each area to determine continuity of scheelite downward from surface showing.

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

Weather permitting, the work can be underway by March 1st. and completed by September, 1952.

GENERAL TUNGSTEN COMPANY
MINA, NEVADA

Color Co-ordinators, Ltd.

QUESTION #5 Form MF-103

Furnish list of existing facilities with statement of the cost of any necessary rehabilitation or repairs to put into useful and operable condition.

Improve grade and surface of existing roads to the projected development areas.

Estimated cost $1,000.00

GENERAL TUNGSTEN COMPANY
MINA, NEVADA.

Color Co-ordinators, Ltd.

QUESTION #6 Form MF-103

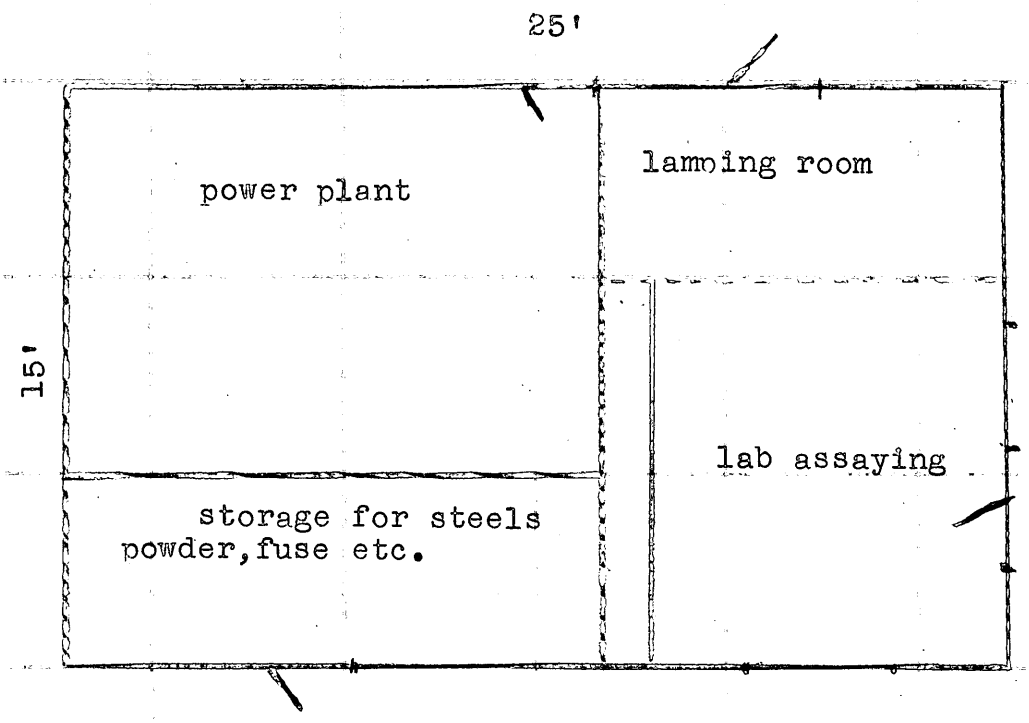
List of additional facilities, buildings, and fixtures to be purchased, installed or erected with estimated cost of each item.

Construct buildings for housing Diesel power plant, assay laboratory, supply storage space and dark room for daylight testing of scheelite ore.

Set poles and run wiring from power plant to the areas to be explored to facilitate night operation both for flood lighting and fluorescent lamping.

Estimated cost $2,500.00

GENERAL TUNGSTEN COMPANY
MINA, NEVADA



Suggested housing for power plant, storage space, laboratory and dark room for lamping.

Estimated cost $ 2500.00

Approximately 20 poles, insullators, 8 switch boxes will be required for lighting system. The Company has 2000' of wireing, 150 hp deisel generating plant, flood lights, and mercury lamps.

QUESTION #6 Form MF-103

GENERAL TUNGSTEN COMPANY
MINA, NEVADA

QUESTION #7 Form M-P-103

(a) EQUIPMENT RENTAL COSTS

1 Bulldozer D-8 or equal	$15. per hour, maintained & operated				
1 315 Air Compressor with wagon drill, steel & bits	$13.	"	"	"	"
1 Shovel 3/4 yd.	$14.	"	"	"	"
1 Skip loader 1½ yds.	$13.	"	"	"	"
1 8 yd. Dump truck	$6.75	"	"	"	"

(b) TO BE PURCHASED

Est. cost of drill bits, powder, caps, fuse, gasoline and Diesel fuel $1,500 per month

(c) Furnished by Company

	Cost
1 150 horsepower Diesel power plant for lighting equipment, night operation	$6,000.
1 1951 Chevrolet pickup truck	2,000.
Fluorescent Lighting equipment and portable power plant	1,000.
Assay laboratory equipment	1,000.
Total	$10,000.

Estimated depreciation $175. per month to be charged to project.

GENERAL TUNGSTEN COMPANY
MINA, NEVADA

Color Co-ordinators, Ltd.

QUESTION #8 Form MF-103

Itemized schedule for labor

One General Superintendant	$600.00	per month
One Working Foreman	400.00	" "
One Powderman and Driller	350.00	" "
One Laborer	250.00	" "
One Truck Driver	350.00	" "
	$1,950.00	per month

Equipment operators are included in the rental and maintenance cost.

GENERAL TUNGSTEN COMPANY
MINA, NEVADA

Color Co-ordinators, Ltd.

QUESTION #9 Form MF-103

Detailed list with estimated cost of each item for materials, supplies, engineering, assaying, power water, utilities, etc.

Powder per month	$700.00	per	month
Steel, fuse, caps	850.00	"	"
Gasoline, Diesel oil	250.00	"	"
Engineering - Assaying	600.00	"	"
Accounting	250.00	"	"
Water	5.00	"	"
Utilities	25.00	"	"
Telephone	50.00	"	"
Insurance	100.00	"	"
Transportation 2 cars	150.00	"	"
	$2,975.00	per	month

GENERAL TUNGSTEN COMPANY
MINA, NEVADA

Color Co-ordinators, Ltd.

QUESTION #10 MF-103

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

Approximately $10,000.00, or 25% of the Government loan.

(b) This amount is sufficient to pay our part of the cost of the project, in accordance with the regulations on Government participation.

GENERAL TUNGSTEN COMPANY
MINA, NEVADA

Color Co-ordinators, Ltd.

QUESTION #11 MF-103

Everything not covered by the foregoing questions has been detailed in the Engineering Report.

GENERAL TUNGSTEN COMPANY
MINA, NEVADA

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-2381

Date received 2-18-52

GENERAL TUNGSTEN COMPANY
MINA, NEVADA

Name and address of applicant

Date 12/31/1951

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? Tungsten (Scheelite ore)
   (*b*) What are the byproducts, if any? Pyrite
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. None
   (*b*) Linear feet of drifts and crosscuts. Three exploratory crosscuts - 75'
   (*c*) Linear feet of tunnels or adits. None
   (*d*) Linear feet of other mine openings (explain briefly). Exploratory bulldozer cuts - 3500'

   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. 20 miles north to Mina, Hwy. 95
   (*b*) Mining district. Rock Hill
   (*c*) Township, Section, Range. Twsp.3N., Sec 3; Twsp.4N, Sec 34, Range 36 East.
   (*d*) County, State. Esmeralda County, Nevada
4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated. Exploratory work only
   (*b*) Are you operating this property as:
   - ☒ Owner. See Deed copy and map
   - ☐ Lessee.
   - ☐ Contractor.

   FEB 18 1952
5. Number of years in production None

   If not in production or operation, estimated date when production will begin upon approval of Government Loan
6. Experience of operators: See pages attached

   Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who manage the project.
7. History: See pages attached
   (*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)
Ralph H. Thomson 50 Federal St. Boston, Mass.	Sec. Partner	none				None	
Charles S. Bryson 50 Rockefeller Plaza New York, N. Y.		None				None	
Harry Lee Martin 257 S. Spring St. Los Angeles, Calif.		None				None	
Irene Sykes Elko, Nevada	Sec. Partner	None	50,000.			None	
	Total		x x x x x			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	$	$	$		
Preferred stock	$	$	$		

*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.)	none				
2. Quantity of product processed (specify unit of measure and type of process)	none				
3. Quantity and grade of product sold or shipped (specify units of measure)	none				

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. Then in production estimate 100 tons daily

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. See [illegible] reports attached

(*b*) If deposit is other than placer: Deposit is not developed (see engineering report attached)

(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: Not 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. 20 miles to [illegible] 25 miles along border highway

14. Water Supply:

State source and quantity of water available for operations and whether sufficient for all seasons of year. Hauled in 50 gal. drums - open pit mine, water needed only for equipment

15. Power:

State amount of power used, rate per hour, and source thereof. 150 horsepower diesel cut generator for lighting plant. All equipment diesel powered.

16. Labor:

State number and classes (miners, muckers, millmen, etc.) of men employed during a recent representative payroll period. Open pit operation requires two miners for drilling, bulldozer and shovel operators all available under contract.

17. Equipment and Facilities:

Describe present equipment on the property, including buildings. (State condition.) List major pieces of equipment now owned, controlled and in serviceable condition available for this operation. See list of equipment available from Kaiser Gravel under control.

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.

General Bungalow Company
(Name of company)

By Irene Sykes
(Signature of authorized official)

December 31, 1971
(Date)

General Partner
(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

Question No. 7

HISTORY

(A) This property was discovered and was located in May of 1951; exploratory work was started September 15th, consisting of bulldozer cuts, open pit drilling and blasting in areas shown on topographical map marked No. 1-2-3-4 and 5. Note assay from these areas.

The work has been continuous to date of application, December 31, 1951.

(B) The nearest producing mine, approximately ten miles from this property, is the Black Horse Mine, an open pit operation owned by Don Bergernier. It is not known the exact tonnage shipped from this property but it is reported to be in excess of 20,000 tons of ore, averaging under 0.75%. It is recently rumored that a large rich deposit has been opened up, running as high as 8% grade.

Adjoining GENERAL TUNGSTEN property are the 13 McCoy claims, leased to California and Nevada Tungsten Corporations. The work has been largely exploratory but it is understood that a stockpile in excess of a thousand tons has been hauled to the Sodaville Mill, owned by Nevada Tungsten.

The fabulous Silver Dyke is approximately 12 miles from these claims.

Since this is such a new discovery, the area has no history of production.

See copies of geologic reports, mine examinations, and metallurgical investigations attached.

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-0381
Metal or Mineral
Date Received 2-18-52
Amount $
Participation (Government %)

Name and address of applicant

Date 1/11/1951

If you have already filed MF-100, give date filed Attached, type of assistance requested Exploratory loan

DMA Docket Number (if available)

INSTRUCTIONS

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

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

   (*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. Owner

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

   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. No liens or encumbrances

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

   (*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.
   See engineering reports attached - to be returned

FEB 1 0 1952

16—64067-2

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.

GENERAL TUNGSTEN COMPANY
(Name of company)

By Irene Sykes
(Signature of authorized official)

12/31/1951
(Date)

General Partner
(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

SECTION #3 Form MP-103

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

For a total estimated cost of $40,000.00 we propose to remove overburden with bulldozer and skiploader from five separate areas, noted on the attached topographical map as Numbers 1 - 2 - 3 - 4 - and 5, to expose bedrock where outcrops and previous explorations have indicated probable existing ore bodies. We will then explore all lenses giving favorable evidence of commercial ore to determine length and depth of each area. We also plan to drive drifts at the base of each area to determine continuity of scheelite discovered from surface showing.

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

Weather permitting, the work can be underway by March 1st. and completed by September, 1972.

CRITICAL MINERALS COMPANY
RENO, NEVADA

Color Co-ordinators, Ltd.

QUESTION #5 Form SP-109

Furnish list of existing facilities with statement of the cost of any necessary rehabilitation or repairs to put into useful and operable condition.

Improve grade and surface of existing roads to the projected development areas.

Estimated cost $1,000.00

GENERAL TURQUOISE COMPANY
ELKO, NEVADA

Color Co-ordinators, Ltd.

SUPPLEMENTAL Form EP-103

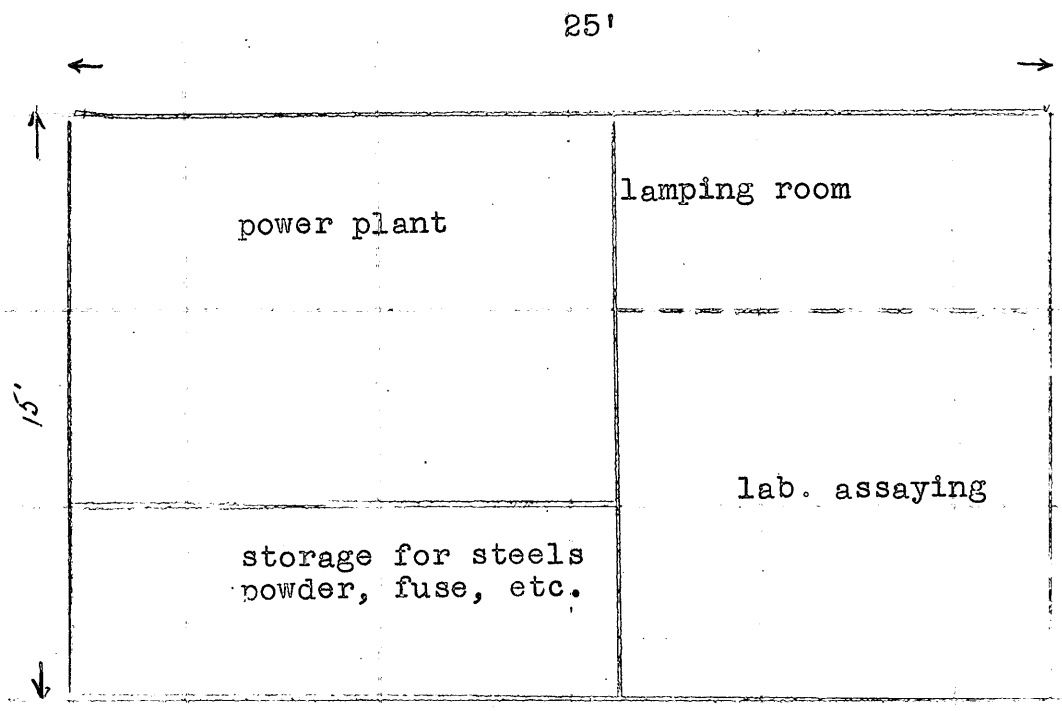
List of additional facilities, buildings, and fixtures to be purchased, installed or erected with estimated cost of each item.

Construct buildings for housing Diesel power plant, assay laboratory, supply storage space and dark room for daylight testing of autunite ore.

Set poles and run wiring from power plant to the areas to be explored to facilitate night operation both for flood lighting and fluorescent lamping.

Estimated cost $2,000.00

GENERAL URANIUM COMPANY
RENO, NEVADA



Suggested housing for power plant, storage space, laboratory and dark room for lamping.

Estimated cost $2,500.00

Approximately 20 poles, insulators, eight switch boxes will be required for lighting system. The Company has 2000' of wiring, 150 Hp. Diesel generating plant, flood lights, and mercury lamps.

(PRINTED IN Form 17-103

GENERAL WATCH COMPANY
MILL, NEVADA

[illegible] 47 Page [illegible]-[illegible]-[illegible]

(a) [illegible] Costs

1 Bulldozer D-8 or equal	$30. per hour, maintained & operated				
1 [illegible] Air Compressor with [illegible] gallon drill, steel & bits	$15.	"	"	"	"
1 Diesel [illegible] yd.	$10.	"	"	"	"
1 Jeep Loader 1½ yds.	$20.	"	"	"	"
1 [illegible] yd. Dump Truck	$0.75	"	"	"	"

(b) [illegible] Purchased

Est. cost of drill bits, powder, [illegible], fuse, gasoline and diesel fuel	$1,000 per month

(c) Furnished by Company

	Cost
1 100 horsepower diesel power plant for lighting equipment, night operation	$6,000.
1 1951 Chevrolet pickup truck	2,000.
Fluorescent lighting equipment and portable power plant	1,200.
Assay laboratory equipment	1,000.
Total	$10,200.

Estimated depreciation $170. per month to be charged to project.

[illegible] TUNGSTEN COMPANY
[illegible], [illegible]

Color Co-ordinators, Ltd.

QUESTION #3 Form MP-105

Itemized schedule for labor

One General Superintendant	$600.00	per month
One Working Foreman	400.00	" "
One Powderman and Driller	350.00	" "
One Laborer	250.00	" "
One Truck Driver	350.00	" "
	$1,950.00	per month

Equipment operators are included in the rental and maintenance cost.

GENERAL TUNGSTEN COMPANY
MINA, NEVADA

Color Co-ordinators, Ltd.

QUESTION #8 Form SP-105

Detailed list with estimated cost of each item for materials, supplies, engineering, assaying, power water, utilities, etc.

Powder per month	$700.00	per month
Steel, fuse, caps	300.00	" "
Gasoline, Diesel oil	250.00	" "
Engineering - Assaying	600.00	" "
Accounting	250.00	" "
Water	5.00	" "
Utilities	25.00	" "
Telephone	50.00	" "
Insurance	100.00	" "
Transportation & cars	100.00	" "
	$2,075.00	per month

GENERAL MINING COMPANY
MIRA, NEVADA

Color Co-ordinators, Ltd.

QUESTION #10 [illegible]

(a) How much are you required to invest in the proposed projects

Approximately $10,000.00, or 25% of the Government loan.

(b) This amount is sufficient to pay our part of the cost of the project, in accordance with the regulations on Government participation.

CAROLE [illegible] COMPANY
[illegible], NEVADA

Everything not covered by the foregoing questions has been detailed in the Engineering Report.

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-2381

Date received 2-18-52

CENTRAL TUNGSTEN COMPANY
ELKO, NEVADA

Name and address of applicant

Date 12/31/1951

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? Tungsten (Scheelite ore)
   (*b*) What are the byproducts, if any? Pyrite
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. None
   (*b*) Linear feet of drifts and crosscuts. three exploratory crosscuts - 75'
   (*c*) Linear feet of tunnels or adits. None
   (*d*) Linear feet of other mine openings (explain briefly). exploratory bulldozer cuts -3500'

   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. 20 miles North to Mina, Nevada
   (*b*) Mining district. Rock Hill
   (*c*) Township, Section, Range. Twsp. 8 & 4, No; Range 36 E., Sec. 3 and 34 respectively
   (*d*) County, State. Esmeralda, County, Nevada
4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated. Exploratory work only
   (*b*) Are you operating this property as:
   - [x] Owner.
   - [ ] Lessee.
   - [ ] Contractor.

   See deed dery & map

   FEB 18 1952
5. Number of years in production None
   If not in production or operation, estimated date when production will begin upon approval of Government Loan
6. Experience of operators: See attached information
   Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who manage the project.
7. History: See pages attached
   (*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.

16—63792-2

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)
				Ltd. Partnership			
Ralph E. Thompson 30 Federal St. Boston, Mass.	Ltd. Partner	none				None	
Charles S. Payson 30 Rockefeller Plaza New York, N. Y.	" "	None				None	
Harry Lee Martin 257 S. Sprin St. Los Angeles, Calif.	" "	None				None	
Irene Sykes Mina, Nevada	Gen. Partner	None	$20,000.			None	
	Total		x x x x x			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	$	$	$		
Preferred stock	$	$	$		

*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.)	none				
2. Quantity of product processed (specify unit of measure and type of process)	none				
3. Quantity and grade of product sold or shipped (specify units of measure)	none				

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. When in production estimate 100 tons daily

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.

See two reports attached

Question No. 7

[illegible]

(A) This property was discovered and was located in May of 1951; exploratory work was started September 15th, consisting of bulldozer cuts, open pit drilling and blasting in areas shown on topographical map marked No. 1-2-3-4 and 5. Note assay from these areas.

The work has been continuous to date of application, December 31, 1951.

(B) The nearest producing mine, approximately ten miles from this property, is the Black Horse Mine, an open pit operation owned by Don Bergenier. It is not known the exact tonnage shipped from this property but it is reported to be in excess of 20,000 tons of ore, averaging under 7%. It is recently rumored that a large rich deposit has been opened up, running as high as 8% grade.

Adjoining GENERAL SECRETARY property are the 13 Betty claims, leased to California and Nevada Tungsten Corporations. The work has been largely exploratory but it is understood that a stockpile in excess of a thousand tons has been hauled to the Sodaville Mill, owned by Nevada Tungsten.

The fabulous Silver Syncline is approximately 12 miles from these claims.

Since this is such a new discovery, the area has no history of production.

See copies of geologic reports, mine examinations, and metallurgical investigations attached.

(b) If deposit is other than placer: Deposit is not developed (no engineering report attached).

(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: Not 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. 20 miles to to Mina on Hgwy. 95. Mining claims border highway

14. Water Supply: Hauled in 50 gal. drums - open pit mine, water needed only for equipment

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

15. Power: 150 horsepower Diesel and generator for lighting plant. All equipment Diesel powered.

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

16. Labor: Open pit operationrequires two miners for drilling. Bulldozer and shovel operators all available under contract.

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. See list of equipment available from H. W. Church under contract.

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.

General Tungsten Company
(Name of company)

By Irene Sykes Irene Sykes
(Signature of authorized official)

December 31, 1951
(Date)

General Partner
(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

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-2381
Metal or Mineral
Date Received 2-18-52
Amount $
Participation (Government %)

GENERAL TUNGSTEN COMPANY
MINA, NEVADA

Name and address of applicant

Date 12/31/1951

If you have already filed MF-100, give date filed Attached, type of assistance requested Exploratory loan

DMA Docket Number (if available)

INSTRUCTIONS

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

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

   (*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. Owner

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

   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. No liens or encumbrances

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

   (*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.

See engineering reports attached - to be returned

16—64067-2

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.

GENERAL TUNGSTEN COMPANY
(Name of company)

By Jamie Sykes
(Signature of authorized official)

12/31/1951
(Date)

General Partner
(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

Color Co-ordinators, Ltd.

QUESTION #3 Form MF-103

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

For a total estimated cost of $40,000.00 we propose to remove overburden with bulldozer and skiploader from five separate areas, noted on the attached topographical map as Numbers 1 - 2 - 3 - 4 - and 5, to expose bedrock where outcrops and previous explorations have indicated probable existing ore bodies. We will then explore all lenses giving favorable evidence of commercial ore to determine length and depth of each area. We also plan to drive drifts at the base of each area to determine continuity of scheelite downward from surface showing.

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

Weather permitting, the work can be underway by March 1st. and completed by September, 1952.

GENERAL TUNGSTEN COMPANY
MINA, NEVADA

Color Co-ordinators, Ltd.

QUESTION #5 Form MF-103

Furnish list of existing facilities with statement of the cost of any necessary rehabilitation or repairs to put into useful and operable condition.

Improve grade and surface of existing roads to the projected development areas.

Estimated cost $1,000.00

GENERAL TUNGSTEN COMPANY
MINA, NEVADA

Color Co-ordinators, Ltd.

QUESTION #6 Form XF-105

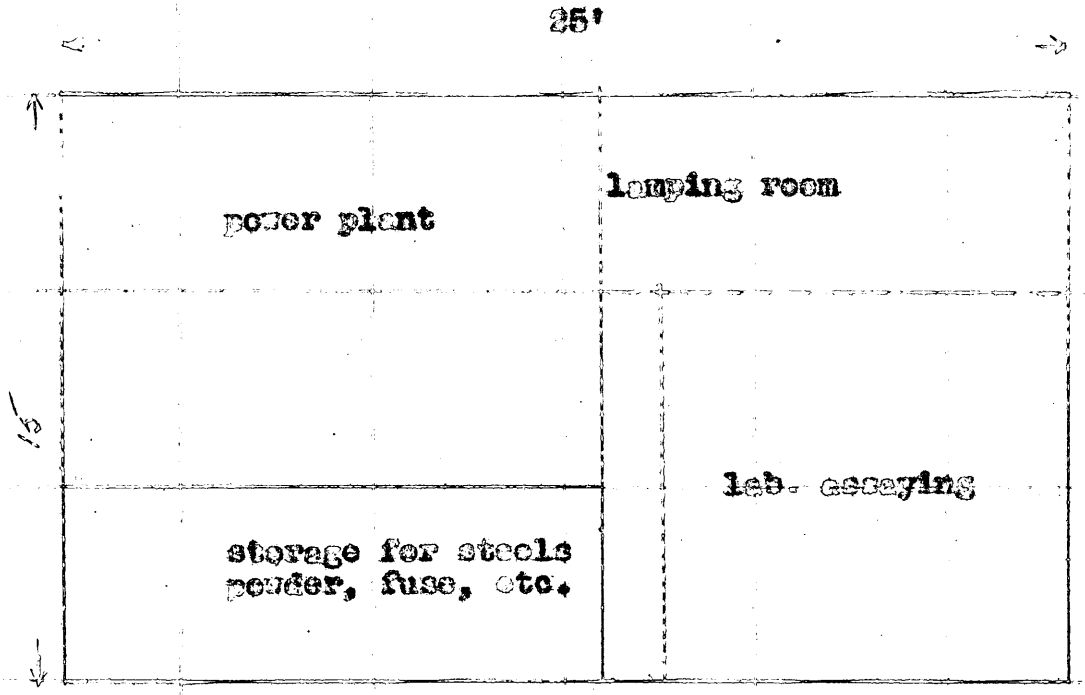
List of additional facilities, buildings, and fixtures to be purchased, installed or erected with estimated cost of each item.

Construct buildings for housing Diesel power plant, assay laboratory, supply storage space and dark room for daylight testing of scheelite ore.

Set poles and run wiring from power plant to the areas to be explored to facilitate night operation both for flood lighting and fluorescent lamping.

Estimated cost $1,500.00

GENERAL TUNGSTEN COMPANY
MINA, NEVADA



Suggested housing for power plant, storage space, laboratory and dark room for lamping.

Estimated cost $2,500.00

Approximately 20 poles, insulators, eight switch boxes will be required for lighting system. The Company has 2000' of wiring, 150 Hp. Diesel generating plant, flood lights, and mercury lamps.

QUESTION #6 Form WP-103

GENERAL TUNGSTEN COMPANY
MINA, NEVADA

ATTACHED 87 Form E-P-103

(a) EQUIPMENT RENTAL COSTS

1 Bulldozer D-8 or equal	$16.	per hour, maintained & operated			
1 315 Air Compressor with Wagon drill, steel & bits	$13.	"	"	"	"
1 Shovel 3/4 yd.	$14.	"	"	"	"
1 Skip loader 1½ yds.	$10.	"	"	"	"
1 8 yd. Dump truck	$8.75	"	"	"	"

(b) TO BE PURCHASED

Est. cost of drill bits, powder, caps, fuse, gasoline and Diesel fuel $1,000 per month

(c) Furnished by Company

	Cost
1 100 horsepower Diesel power plant for lighting equipment, night operation	$6,000.
1 1951 Chevrolet pickup truck	2,000.
Fluorescent lighting equipment and portable power plant	1,000.
Assay laboratory equipment	1,000.
Total	$10,000.

Estimated depreciation $175. per month to be charged to project.

CURTIS TUNGSTEN COMPANY
ELKO, NEVADA

Color Co-ordinators, Ltd.

QUESTION #8 Form MF-103

Itemized schedule for labor

One General Superintendant	$600.00	per	month
One Working Foreman	400.00	"	"
One Powderman and Driller	350.00	"	"
One Laborer	250.00	"	"
One Truck Driver	350.00	"	"
	$1,950.00	per	month

Equipment operators are included in the rental and maintenance cost.

GENERAL TUNGSTEN COMPANY
MINA, NEVADA

Color Co-ordinators, Ltd.

QUESTION 10 Form MP-103

Detailed list with estimated cost of each item for materials, supplies, engineering, assaying, power water, utilities, etc.

Powder per month	$700.00	per month
Steel, fuse, caps	050.00	" "
Gasoline, Diesel oil	250.00	" "
Engineering - Assaying	000.00	" "
Accounting	250.00	" "
Water	6.00	" "
Utilities	25.00	" "
Telephone	50.00	" "
Insurance	100.00	" "
Transportation & cars	150.00	" "
	$2,075.00	per month

Color Co-ordinators, Ltd.

QUESTION #11 EF-103

Everything not covered by the foregoing questions has been detailed in the Engineering Report.

GENERAL TUNGSTEN COMPANY
MINA, NEVADA

Form MF-100
(May 1951)

U. 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-2381

Date received 2-18-52

GENERAL TUNGSTEN COMPANY
MINA, NEVADA

Name and address of applicant

Date 12/31/1951

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? Tungsten (Schleelite ore)
   (*b*) What are the byproducts, if any? Pyrite
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. None
   (*b*) Linear feet of drifts and crosscuts. three exploratory crosscuts - 75'
   (*c*) Linear feet of tunnels or adits. None
   (*d*) Linear feet of other mine openings (explain briefly). Exploratory bulldozer cuts -3500'

   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. 20 miles North to Mina, Highway95
   (*b*) Mining district. Rock Hill
   (*c*) Township, Section, Range. Twsp. 3 & 4, No; Range 36 E. Sec. 3 and 34 respectively
   (*d*) County, State. Esmeralda, County, Nevada
4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated. Exploratory work only
   (*b*) Are you operating this property as:
   - ☒ Owner. See deed copy & map
   - ☐ Lessee.
   - ☐ Contractor.
5. Number of years in production None

   If not in production or operation, estimated date when production will begin upon approval of Government Loan
6. Experience of operators: See attached information

   Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who manage the project.
7. History: See pages attached
   (*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)
				Ltd. Partnership			
Ralph E. Thompson	Ltd. Partner					None	
30 Federal St. Boston, Mass.		none					
Charles S. Payson	" "					None	
30 Rockefeller Plaza New York, N. Y.		None					
Harry Lee Martin	" "					None	
257 S. Sprin St. Los Angeles, Calif.		None					
Irene Sykes Mine, Nevada	Gen. Partner	None	$20,000.			None	
	Total		x x x x x			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	$	$	$		
Preferred stock	$	$	$		

*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.)	none				
2. Quantity of product processed (specify unit of measure and type of process)	none				
3. Quantity and grade of product sold or shipped (specify units of measure)	none				

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. When in production estimate 100 tons daily

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.

See two reports attached

Question No. 7

HISTORY

(A) This property was discovered and was located in May of 1951; exploratory work was started September 15th, consisting of bulldozer cuts, open pit drilling and blasting in areas shown on topographical map marked No. 1-2-3-4 and 5. Note essay from these areas.

The work has been continuous to date of application, December 31, 1951.

(B) The nearest producing mine, approximately ten miles from this property, is the Black Horse Mine, an open pit operation owned by Don Bergernier. It is not known the exact tonnage shipped from this property but it is reported to be in excess of 20,000 tons of ore, averaging under 75%. It is recently rumored that a large rich deposit has been opened up, running as high as 8% grade.

Adjoining GENERAL TUNGSTEN property are the 13 McCoy claims, leased to California and Nevada Tungsten Corporations. The work has been largely exploratory but it is understood that a stockpile in excess of a thousand tons has been hauled to the Sodaville Mill, owned by Nevada Tungsten.

The fabulous Silver Dyke is approximately 12 miles from these claims.

Since this is such a new discovery, the area has no history of production.

See copies of geologic reports, mine examinations, and metallurgical investigations attached.

(b) If deposit is other than plac[illegible] Deposit is not developed (see engineering [illegible]port attached)

(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: Not 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. 20 miles to to Mina on Hgwy. 95. Mining claims border highway

14. Water Supply: Hauled in 50 gal. drums - open pit mine, water needed only for equipment

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

15. Power: 150 horsepower Diesel and generator for lighting plant. All equipment Diesel powered.

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

16. Labor: Open pit operationrequires two miners for drilling. Bulldozer and shovel operators all available under contract.

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. See list of equipment available from H. W. Church under contract.

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.

General Tungsten Company
(Name of company)

By Irene Sykes (Signature of authorized official) Irene Sykes

December 31, 1951
(Date)

General Partner
(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

(copy)

DMEA-2381

UNITED STATES VANADIUM COMPANY

Bishop, California

Sept. 15, 1951

Mrs. Irene Sykes
1239 South Beverly Glen Boulevard
Los Angeles 24, California

Dear Mrs. Sykes:

We have completed our amenability research on your ore and have found that we can treat it satisfactorily.

Enclosed is a copy of our current ore Purchasing Schedule, quoting the prices and terms under which we are purchasing scheelite ores delivered f.o.b. our plant at Pine Creek, California.

Will you please advise us when you will start shipping, and what tonnage we may expect.

Very truly yours,

UNITED STATES VANADIUM CO.

sgd/ R. D. Carpenter

Chief Metallurgist

RDC:me

encl.

C
O
P
Y

UNITED STATES VANADIUM COMPANY
A Division of Union Carbide and Carbon Corporation
Bishop, California

Sept. 24, 1951

Mrs. Irene Sykes
Commodore Hotel
New York City, New York

Dear Mrs. Sykes:

Our analysis of the tungsten ore samples which you submitted September 19th are as follows:-

Monte Cristo No. 1

% WO_3	.....	1.77
% Mo	.....	Nil

Monte Cristo No. 3

% WO_3	.....	1.85
% Mo	.....	Nil

Enclosed is a copy of our current ore Purchasing Schedule.

Very truly yours,

UNITED STATES VANADIUM CO.

/s/ R. D. Carpenter
Chief Metallurgist

RDC:me

encl.

Report

on the

COBALT-TUNGSTEN ASSOCIATES MINE

Esmeralada County, Nevada

October, 1951 Dudley L. Davis

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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. .....
Metal or Mineral .....
Date Received .....
Amount $.....
Participation (Government %) .....

GENERAL TUNGSTEN COMPANY

MINA, NEVADA

Name and address of applicant

Date 12/31/1951

If you have already filed MF-100, give date filed Attached, type of assistance requested Exploratory loan

DMA Docket Number (if available) .....

INSTRUCTIONS

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

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

   (*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. Owner

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

   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. No liens or encumbrances

   12/31/1951

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

   (*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.
   See engineering reports attached - to be returned.

16—64067-2

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.

GENERAL TUNGSTEN COMPANY
(Name of company)

By Jane Sykes
(Signature of authorized official)

12/31/1951
(Date)

General Partner
(Title)

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

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

Form MF-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. _____

Date received _____

[illegible] COUNTY
[illegible], NEVADA

Name and address of applicant

Date 12/31/1951

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? Tungsten (Scheelite ore)
   (*b*) What are the byproducts, if any? None
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. None
   (*b*) Linear feet of drifts and crosscuts. Three exploratory crosscuts - 75'
   (*c*) Linear feet of tunnels or adits. None
   (*d*) Linear feet of other mine openings (explain briefly). Exploratory bulldozer cuts -3500'

   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. 10 miles South to Mina, Nevada
   (*b*) Mining district. Wassuk, S. G. 4, No. Range 38 E., Sec. 3 and 34 respectively
   (*c*) Township, Section, Range. Mineral County, Nevada
   (*d*) County, State. Exploratory work only
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: [illegible]
   - ☐ Owner.
   - ☐ Lessee.
   - ☐ Contractor.
5. Number of years in production None

   If not in production or operation, estimated date when production will begin Upon approval of Government loan

   See attached information
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. See pages attached
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)
				Ltd. Partnership			
Ralph E. Thompson 30 Federal St. Boston, Mass.	Ltd. Partner	none				None	
Charles S. Payson 30 Rockefeller Plaza New York, N. Y.	" "	None				None	
Harry Lee Martin 257 S. Sprin St. Los Angeles, Calif.	" "	None				None	
Irene Sykes Mine, Nevada	Gen. Partner	None	$20,000.			None	
	Total		x x x x x			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	$	$	$		
Preferred stock	$	$	$		

*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.)	none				
2. Quantity of product processed (specify unit of measure and type of process)	none				
3. Quantity and grade of product sold or shipped (specify units of measure)	none				

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. When in production estimate 100 tons daily

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. See two reports attached

(b) If deposit is other than placer: Deposit is not developed (see engineering report attached)

(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: Not 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. 20 miles to to Lina on Hgwy. 95. Mining claims border highway

14. Water Supply: Hauled in 50 gal. drums - open pit mine, water needed only for equipment

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

15. Power: 150 horsepower Diesel and generator for lighting plant. All equipment Diesel powered.

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

16. Labor: Open pit operationrequires two miners for drilling. Bulldozer and shovel operators all available under contract.

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. See list of equipment available from H. W. Church under contract.

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.

General Tungsten Company
(Name of company)

By Irene Sykes
(Signature of authorized official)

December 31, 1951
(Date)

General Partner
(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

Color Co-ordinators, Lt

[illegible] Form [illegible]-103

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

For a total estimated cost of [illegible],000.00 we propose to remove overburden with bulldozer and skiploader from five separate areas, noted on the attached topographical map as Numbers 1 - 2 - 3 - 4 - and 5, to expose bedrock where outcrops and previous explorations have indicated probable existing ore bodies. We will then explore all lenses giving favorable evidence of commercial ore to determine length and depth of each area. We also plan to drive drifts at the base of each area to determine continuity of scheelite mineral from surface showing.

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

Weather permitting, the work can be underway by March 1st. and completed by September, 1952.

[illegible] [illegible]
[illegible], [illegible]

Color Co-ordinators, Lt

QUESTION #6 Form HP-103

Furnish list of existing facilities with statement of the cost of any necessary rehabilitation or repairs to put into useful and operable condition.

Improve grade and surface of existing roads to the projected development areas.

Estimated cost $1,000.00

Not necessary for approval of Elevation
R. E. G.

GENERAL MINING COMPANY
RENO, NEVADA

Color Co-ordinators, Lt

SECTION 60 Form SF-103

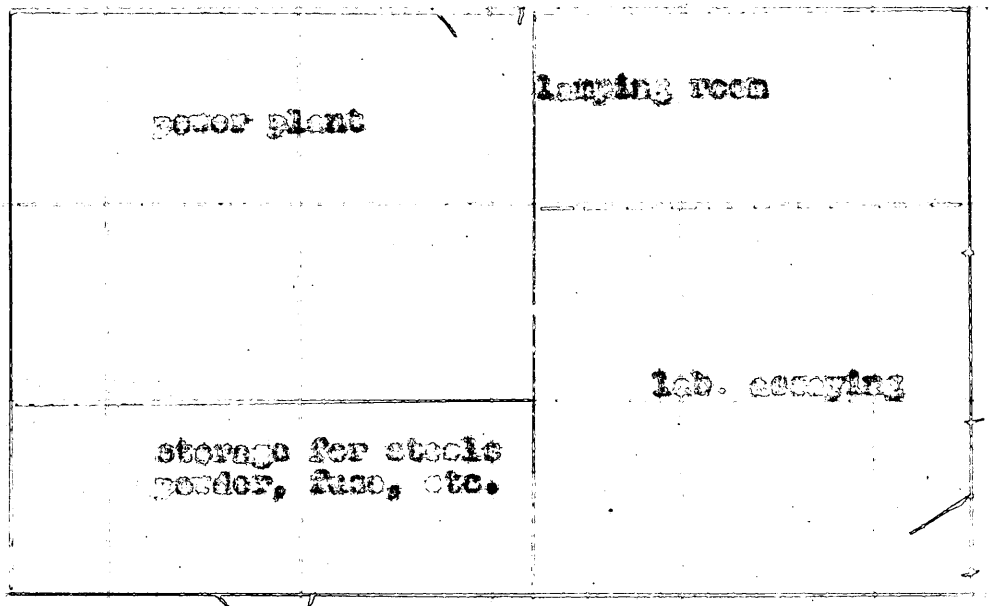
List of additional facilities, buildings, and fixtures to be purchased, installed or erected with estimated cost of each item.

Construct buildings for housing diesel power plant, assay laboratory, supply storage space and dark room for daylight testing of scheelite ore.

Set poles and run wiring from power plant to the areas to be explored to facilitate night operation both for flood lighting and fluorescent lighting.

Estimated cost $1,500.00

Not necessary for proposed exploration.
R.C.G.



Not necessary for Bangalore Ordnance Co.

Suggested housing for power plant, storage space, laboratory and dark room for loading.

Estimated cost $2,500.00

Approximately 50 poles, insulators, eight switch boxes will be required for lighting system. The Company has 2000' of wiring, 150 Kw. Diesel generating plant, flood lights, and mercury lamps.

CHEMICAL FOUNDATION COLLECTION
ETC., UNIDI

[illegible] by [illegible]

(a) [illegible]

✓ 1 [illegible] DC or equal	[illegible] per hour, [illegible]				
✓ 1 [illegible] Air Compressor with [illegible]	[illegible]				
✓ 1 [illegible]	[illegible]				
✓ 1 [illegible]	[illegible]				
✓ 1 [illegible]	[illegible]				

(b) [illegible]

✓ [illegible] cost of drill bits, [illegible], [illegible], [illegible], gasline and diesel fuel — [illegible] per month

(c) Furnished by Company

	Cost
✓ 1 100 horsepower diesel power plant for lighting equipment, night operation	[illegible]
1 1000 thousand rising [illegible]	[illegible]
✓ Miscellaneous lighting equipment and portable power plant	[illegible]
✓ Assay laboratory equipment	[illegible]
Total	[illegible]

Estimated depreciation [illegible] per month to be charged to project.

[illegible]
[illegible]

Items checked not necessary for approved exploration

Color Co-ordinators, Ltd.

QUESTION #3 Form EP-103

Itemized schedule for labor

✓ One General Superintendent	$600.00	per month
✓ One Working Foreman	400.00	" "
✓ One Powderman and Driller	350.00	" "
One Laborer	250.00	" "
✓ One Truck Driver	350.00	" "
	$1,950.00	per month

Equipment operators are included in the rental and maintenance cost.

Items Checked not necessary for proposed exploration.
R.C.F.

GENERAL TUNGSTEN COMPANY
MIRA, NEVADA

Color Co-ordinators, Lt[illegible]

[illegible] 20 Form [illegible]-120

Detailed list with estimated cost of each item for materials, supplies, engineering, assaying, power water, utilities, etc.

Powder per month	$700.00	per month
Steel, fuse, caps	[illegible]	" "
Gasoline, Diesel oil	[illegible]	" "
Engineering - Assaying	[illegible]	" "
Accounting	[illegible]	" "
Water	[illegible]	" "
Utilities	[illegible]	" "
Telephone	[illegible]	" "
Insurance	[illegible]	" "
Transportation & cars	[illegible]	" "
	$[illegible]	per month

Not necessary for Original application. A.C.J.

[illegible]
[illegible]

Color Co-ordinators, Ltd.

QUESTION #10 SP-109

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

Approximately $10,000.00, or 25% of the Government loan.

(b) This amount is sufficient to pay our part of the cost of the project, in accordance with the regulations on Government participation.

$25,000 all that is necessary for proposed exploration
E.C.J.

OPTICAL SCANNER COMPANY
RENO, NEVADA

[illegible] #11 [illegible]-105

Everything not covered by the foregoing questions has been detailed in the Engineering Report.

[illegible]
[illegible], [illegible]

Section No. 7

[illegible]

(a) This property was discovered and was located in May of 1951; exploratory work was started September 1951, consisting of bulldozer work, open pit drilling and blasting in areas shown on topographical map marked No. 1-2-3-4 and 5. Work away from these areas.

The work was been continuous to date of application, December 11, 1951.

(b) The nearest producing mine, approximately ten miles from this property, is the Black Rock Mine, an open pit operation owned by Ben Bergquist. It is not known the exact tonnage shipped from this property but it is reported to be in excess of 20,000 tons of ore, averaging under 7%. It is recently learned that a large rich deposit has been opened up, running as high as 25 grade.

Adjoining Alpha Minerals property are the 13 Mary claims, located in California and Nevada Empire Corporations. The mine has been largely exploratory but it is understood that a stockpile in excess of a thousand tons has been hauled to the Scheelite Mill, owned by Nevada Scheelite.

The Pinion Silver Mine is approximately 12 miles from these claims.

Upon this is such a new discovery, the area has no history of production.

Two copies of geologic reports, also contractors, and metallurgical investigations attached.

Report on the
COBALT-TUNGSTEN ASSOCIATES MINE
Esmeralda County, Nevada

Introduction

At the request of Mrs. Irene Sykes of 1239 South Beverly Glen Blvd., Los Angeles 24, California, a preliminary examination of three properties optioned by Cobalt-Tungsten Associates was made on September 15, 1951. As a result of this examination Mrs. Sykes was advised that the Rock Hill group should be given a more thorough investigation.

The Rock Hill Group of eight contiguous lode claims showed encouraging tungsten mineralization and favorable geologic conditions such that a sampling and development program was recommended. The following report is the result of field work done on the property on October 13th and 14th and again on October 27th and 28th.

Location of Property

The Cobalt-Tungsten Associates property is situated in section 24, Township 4 North, Range 36 East, Mount Diablo Meridian. A mill site claim is located nearby in section 2, Township 3 North, Range 36 East, M. D. M. U. S. Highway 95 runs to within 1200 feet of the mine and immediately past the mill site. (See enclosed geologic map.)

Physiographically, the property is situated near the southeast end of the Candelaria Hills immediately north of Columbus Marsh. Topographic relief is moderate; elevations range from 4600 on an alluvial fan near the east side of the Half Moon Claim to 5200 feet above mean sea level on the crest of a ridge on the Half Moon No. 1 claim.

Ownership

The enclosed property map shows the property held by the Cobalt-Tungsten Associates and neighboring owners. This map shows areas of conflict between claims held by the Woodward interests on the south and the McCoy property operated by Edward G. Fromley on the north.

The McCoy fraction is small and relatively unimportant since the apex of the ore nearby lies within Cobalt-Tungsten ground, but the Woodward fraction is near a good showing of scheelite mineralization. Negotiations for this fraction are presently in progress.

All claims shown on the property map are held by possessory title. The Cobalt-Tungsten Associates have a lease and option on the Half Moon Tungsten, Half Moon No. 1, Half Moon No. 2, Half Moon No. 3, and Half Moon No. 4 lode claims and hold possessory title by virtue of location on the Half Moon Fraction, Half Moon No. 5, and Pinnaphien

Fraction lode claims.

The claims held by Alice Woodward adjoin the Cobalt-Tungsten holdings on the south and west, the McCoy property bounds them on the north, and the Beruatto property forms their eastern limit.

General Geology

The general geology of this area has been described by Ferguson and Muller* who mapped the areal distribution of the various rock types and noted the folding and faulting but paid little attention to mineralized zones.

Reprints of some of the plates accompanying Ferguson's report are submitted herewith. The index map, a plate showing general geology of an area south of the mine, and an enlargement of a part of the quadrangle map has been used. These maps show the regional geologic picture on which certain assumptions are based.

The rocks at the Cobalt-Tungsten Associates Mine are classified by Ferguson as Ordovician slates. This formation includes some hornfels, limy slate, dolomite, and sandstone. In the area near the abandoned shaft these rocks have been changed to a mica schist by the intrusion of a granitic rock. This granite crops out to the east of the mine area and also to the southwest as shown by Ferguson's maps.

The geologic map and sections prepared by the writer show the folding in the slate series, the granite outcrop, and ore possibilities in the area. Scheelite mineralization was mapped at night by using ultra-violet light and by marking the ground so that mineralized areas could be surveyed during the days.

Mineralization

There are two types of mineralization mapped in the mine area. The most prominent and easily recognized type of mineralization is a swarm of quartz veins which cut the granite and slate. Many of these veins were mapped and are shown on the accompanying prints but many, many small discontinuous veinlets were not mapped as it seemed impractical to do so. These veins consist of a hard, white glassy quartz with mica, scheelite, and fluorite as accessory minerals. On the Beruatto property these quartz veins cut the granite as pegmatitic veins and were developed for fluorite before the tungsten mineralization was recognized. A picked specimen from this property showed hubnerite as well as scheelite associated with the quartz. Scheelite and hubnerite crystals are seen embedded in otherwise massive quartz veins.

The second, less easily recognizable type of mineralization consists of disseminated scheelite in a calcareous portion of the slate.

---

* United States Geological Survey Professional Paper 216. "Structural geology of the Hawthorne and Tonopah quadrangles, Nev., by H. G. Ferguson and S. W. Muller. 1949 (1950)

Scheelite crystals range from minute grains to larger crystals as much as one quarter of an inch across. Some scheelite occurs as small veinlets in fractures parallel with the quartz veins or bedding fractures.

Samples taken from the surface showed the scheelite to be very free from sulphur, molybdenum, copper, and phosphorus.

Development

This is a relatively new district so little has been done to develop ore. A few bulldozer cuts and roads have been made and mining has been started as an open pit in an effort to obtain adequate samples. The McCoy property is being sampled by bulldozer cuts and has one area where open pit mining has been commenced. The deepest working in the district is the old shaft referred to above which was run years ago to develop the quartz veins for mica, fluorite, or andalusite. This shaft is reported to be 300 feet deep but from consideration of the size of the dump it must have a good deal of crosscutting or drifting at depth. The shaft has no guides or manway so is inaccessible at present.

Mining

The Cobalt-Tungsten Associates have entered into an agreement with Mr. Hayden W. Church, 3149 West 152 Place, Los Angeles, California to mine and haul their ore to the U. S. Vanadium mill near Bishop, California. Mr. Church is an earth moving contractor who wishes to enter the metal mining field. He has agreed to furnish all necessary trucks, bulldozers, loaders, and mining equipment; to mine the ore and haul it to the mill for $11.20 per ton.

Mining will be done somewhat selectively by working at night and using large ultra-violet lamps in the pit to show the better ore. Present plans envision mining 50 to 100 tons per day for a test run and if results are favorable, a mill will be erected near the mine.

Milling

The U. S. Vanadium Corporation has agreed to mill ore from this property and pay Cobalt-Tungsten Associates $38.00 per unit of contained WO_3 provided the ore assays not less than 0.4%. No milling charge is to be paid under this agreement as the difference between the price paid the seller and the government supported price is to pay for beneficiation and metallurgical losses.

Conclusions

The Rock Hill group of mining claims held by Cobalt-Tungsten Associates is situated in a relatively new mining district. No deep development work has been done to prove whether surface mineralization will continue with depth.

Recommendations for future development and sampling of the property are therefore based upon geologic inferrence. It is assumed that the quartz veins with which the tungsten mineralization is associated are genetically related to the granite exposed east of and southwest of the mine area. The better scheelite mineralization is localized by

certain calcareous or limy members in the Ordovician slate series.

Because of the many small quartz veins existant several thousand feet away from observed granite outcrops, it is supposed that granite underlies the mine area. If this be true, there is a good possibility of finding ore at or near the granite contact and particularly where it is in contact with the calcareous slate beds.

The following recommendations are made in accordance with these conclusions.

Recommendations

1. Develop surface exposures of scheelite mineralization by trenching with a bulldozer wherever terrain permits. Mineralization in the vicinity of the S. W. corner of the Half Moon No. 2 claim is suitable to this type of sampling. Rental on a bulldozer of adequate size is estimated at $15.00 per hour so that about $3,000.00 will be required for this type of exploration.

2. Prospect the zones of mineralization which occur on steep slopes such as on the Half Moon No. 1 claim by surface longhole drilling. By drilling without water and using a pneumatic dust collector, excellent sampling results have been obtained elsewhere. This method is recommended here. Costs for this type of exploration averaged one dollar per foot of hole drilled at Mountain Pass where the Molybdenum Corporation of America sampled their bastnasite deposit. Satisfactory results were obtained to depths of 100 feet according to Mr. H. D. Bailey who was in charge of the work.

   It is estimated that $10,000.00 will be required to fully prospect areas of mineralization suitable to this method.

3. One or two deep diamond drill holes should be run to find whether granite exists below surface scheelite mineralization and if so, whether stronger mineralization is to be found at or near the granite contact. The first hole recommended is to be drilled in the "Gulch Area" at coordinates 5,360 North and 2,930 east. This hole should be run N. 67° E. for 600 to 750 feet (depending upon where the granite contact is) at minus 80°. If favorable results are obtained in this hole, additional drilling should be done as indicated. A minimum of $10,000.00 should be allocated to diamond drilling.

4. If surface trenching and longhole drilling prove ore in the above locations, some deeper surface exploration should be done by blasting in the mineralized areas thus exposed. A minimum of $5,000.00 should be provided for this purpose.

5. These recommendations can be completed within one year's time unless an extended diamond drilling campaign is found desirable. During this time the service of a resident geologist or engineer will be required to supervise the exploration program outlined

above. Not less than $5,000.00 should be provided for this purpose.

6. The sum of $33,000.00 has been estimated as a minimum amount required to adequately prospect and develop this property. Sampling and assaying have not been included in this estimate but may cost $10,000.00, making a total of $43,000.00.

Respectfully submitted,

Dudley L. Davis

Dudley L. Davis

C
O
P
Y

UNITED STATES VANADIUM COMPANY

Bishop, California

Sept. 15, 1951

Mrs. Irene Sykes
1239 South Beverly Glen Boulevard
Los Angeles 24, California

Dear Mr. Sykes:

We have completed our amenability research on your ore and have found that we can treat it satisfactorily.

Enclosed is a copy of our current ore Purchasing Schedule, quoting the prices and terms under which we are purchasing scheelite ores delivered f.o.b. our plant at Pine Creek, California.

Will you please advise us when you will start shipping, and what tonnage we may expect.

Very truly yours,

UNITED STATES VANADIUM CO.

sgd/ R. D. Carpenter

Chief Metallurgist

RDC:me

encl.

UNITED STATES VANADIUM COMPANY
A Division of Union Carbide and Carbon Corporation
Bishop, California

Sept. 24, 1951

Mrs. Irene Sykes
Commodore Hotel
New York City, New York

Dear Mrs. Sykes:

Our analysis of the tunsten ore samples which you submitted September 19th are as follows:-

Monte Cristo No. 1

% WO_3 . . . . . 1.77
% Mo . . . . . Nil

Monte Cristo No. 3

% WO_3 . . . . . 1.85
% Mo . . . . . Nil

Enclosed is a copy of our current ore Purchasing Schedule.

Very truly yours,

UNITED STATES VANADIUM CO.

/s/ R. D. Carpenter
Chief Metallurgist

RDC:me

encl.

C
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P
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RDC:me

encl.

UNITED STATES VANADIUM COMPANY
A Division of Union Carbide and Carbon Corporation
Bishop, California

Sept. 24, 1951

Mrs. Irene Sykes
Commodore Hotel
New York City, New York

Dear Mrs. Sykes:

Our analysis of the tungsten ore samples which you submitted September 19th are as follows:-

Monte Cristo No. 1

% WO_3 . . . . . 1.17
% Mo . . . . . Nil

Monte Cristo No. 3

% WO_3 . . . . . 1.85
% Mo . . . . . Nil

Enclosed is a copy of our current ore Purchasing Schedule.

Very truly yours,

UNITED STATES VANADIUM CO.

/s/ R. D. Carpenter
Chief Metallurgist

RDC:me

encl.

C
O
P
Y

UNITED STATES VANADIUM COMPANY

Bishop, California

Sept. 15, 1951

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Very truly yours,

UNITED STATES VANADIUM CO.

sgd/ R. D. Carpenter

Chief Metallurgist

RDC:ms

encl.

UNITED STATES VANADIUM COMPANY
A Division of Union Carbide and Carbon Corporation
Bishop, California

Sept. 24, 1951

Mrs. Irene Sykes
Commodore Hotel
New York City, New York

Dear Mrs. Sykes:

Our analysis of the tunsten ore samples which you submitted September 19th are as follows:-

Monte Cristo No. 1

% WO_3 . . . . . 1.17
% Mo . . . . . Nil

Monte Cristo No. 3

% WO_3 . . . . . 1.85
% Mo . . . . . Nil

Enclosed is a copy of our current ore Purchasing Schedule.

Very truly yours,

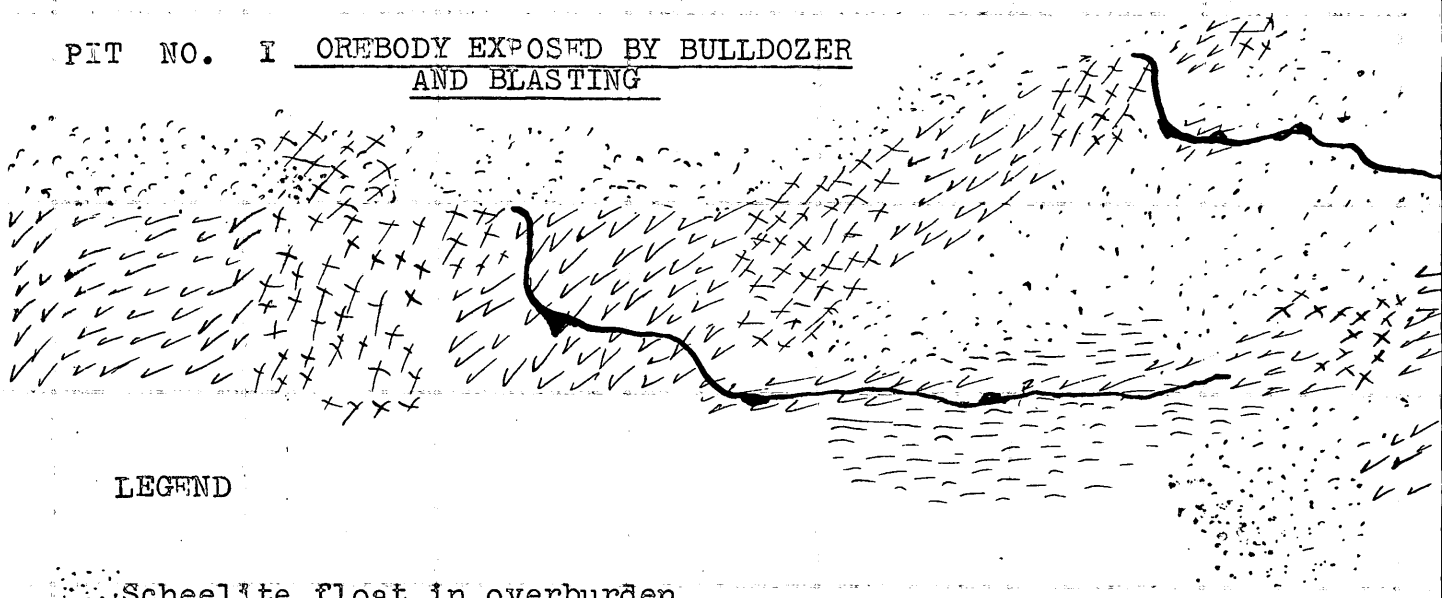
UNITED STATES VANADIUM CO.

/s/ R. D. Carpenter
Chief Metallurgist

RDC:ms

encl.

PIT NO. I OREBODY EXPOSED BY BULLDOZER AND BLASTING



LEGEND

Scheelite float in overburden

Scheelite disseminated in lime, hornblende or dolomite

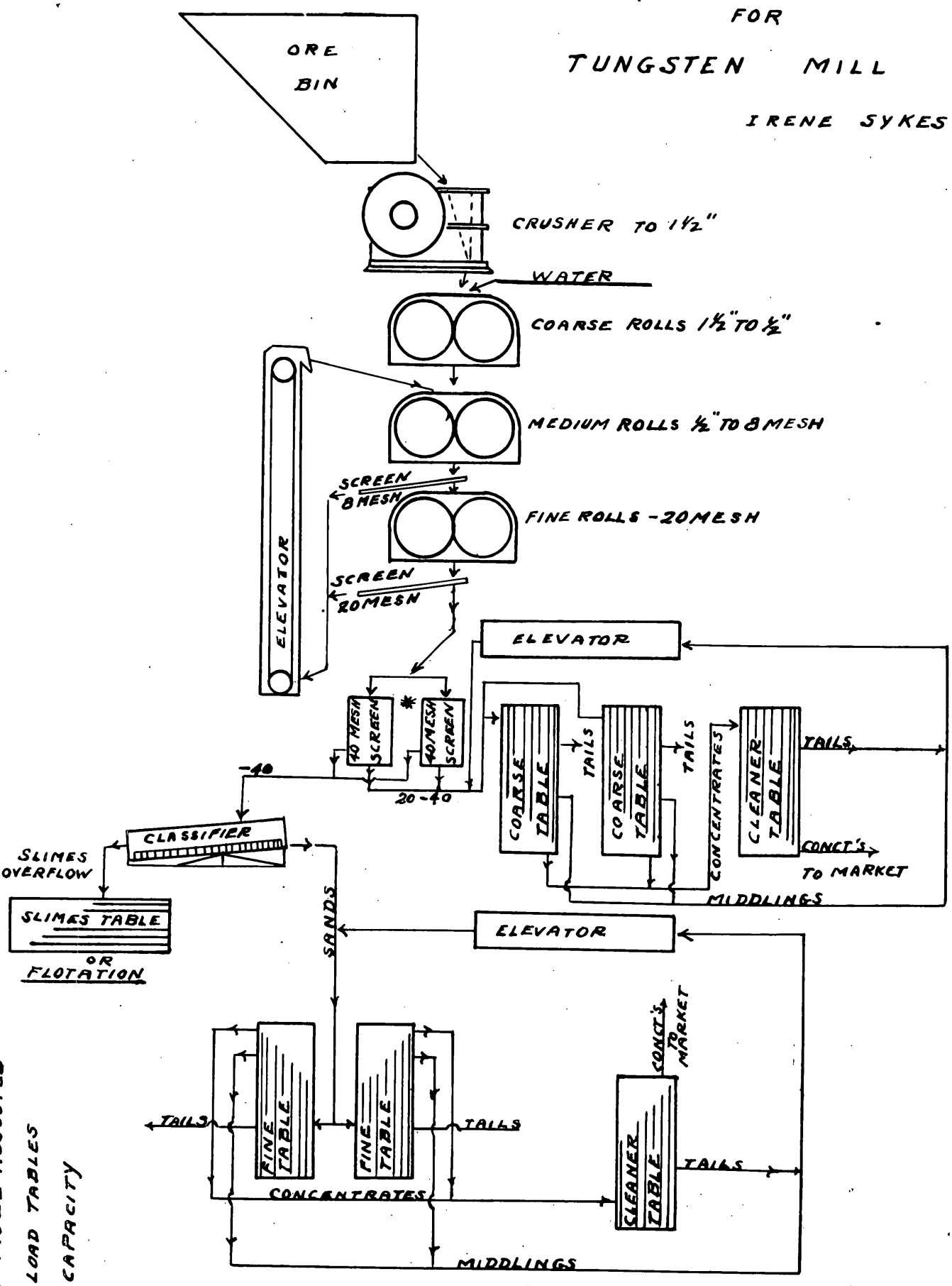
Silicified lime

Dolomite

Quartz viens

PROPOSED FLOW SHEET
FOR
TUNGSTEN MILL

IRENE SYKES



* MESH TO BE ADJUSTED TO LOAD TABLES TO CAPACITY

HARLEY A. SILL

CONSULTING ENGINEER

JAN. 8, 1952

MINING
METALLURGY
CHEMISTRY

ORE TESTING
PLANT DESIGN
METALLURGICAL RESEARCH
ASSAYS & ANALYSES

HARLEY A. SILL
CONSULTING ENGINEER
1011 SOUTH FIGUEROA STREET
LOS ANGELES 15

GRAVITY

PRODUCT	Weight-Grams	% WO_3	Units WO_3	% Total
Recovered Feeds	26,595	1.3 G.	338	100.00
Concentrates 10 - 20 mesh	650	5.26	36	9.00
Middlings 10 - 20 mesh	2,440	.42	10	2.5
Concentrates 20 - 40	635	65.26	196	49.5
Middlings 20 - 40	2,540	3.25	80	20.5
Concentrates 40 - 150 mesh	350	9.04	32	7.5
Middlings 40 - 150 mesh	1,000	0.335	3	0.7
Slimes	200	0.41	4	1.0
Trough 150	2,620	1.00	42	10.5
Tails	16,700	0.16	27	6.8

Recovery
81.2% Classified Feed
9.8% Slimes
91.3% Overall Recovery

FLOTATION

Flotation Feeds	496	1.336	6.6	100
Flotation Concentrates	143	5.3	7.5	83
Flotation Tails	321	0.23	1.1	17

Harley A. Sill
General Tungsten Company
Mina, Nevada

Gentlemen

The research on your metallurgical problem involving the recovery of tungsten from your Nevada scheelite property was based on a sample submitted by you. The analysis of the head sample was 1.46% WO_3. This is considerably higher than the normal ore subjected to beneficiation in milling the tungsten bearing areas of the United States. A study was made of the ore to determine its general characteristics before breaking it down for segregation of the tungsten from the accompanying gangue. Experience with the metallurgical treatment of scheelite ores from many different areas has established the fact that scheelite is inclined to shatter badly when subjected to grinding. Therefore, in our consideration of your problem the primary thought was to release the mineral without excessive grinding. Our secondary consideration was to apply the simplest metallurgy to the treatment of your ore and thus decrease the capital cost.

A study of your ore indicates two types of mineralization: (1) Tungsten occurring in veinlets associated with quartz or in fracture planes, (2) Tungsten disseminated through the matrix. The first of these ores could probably be subjected to jigging with a possible jigged concentrate with the

Harley A. Hill
General Tungsten Company
Hiko, Nevada

fine tungsten going into a batch product for further concentration on Concentrating Tables. It is doubtful if the disseminated scheelite could be so treated. As I viewed your ore, the larger tonnage would come as disseminations and, therefore, in my opinion, a jig may not serve a useful purpose in the recovery of the values from your ore.

With this thought as a premise for our research, your ore was crushed through a gyratory crusher to approximately 1/8" and then further reduced in a set of rolls through 10 mesh. The underflow from the rolls was screened through vibratory screens making three sizes -

(1) -10 + 20

(2) -20 + 40

(3) -40 + 150

(4) slimes

These various products were removed as made to become a classified feed to the Concentrating Tables. The purpose of screening after the secondary crushing through the rolls was to remove all sizes 10 mesh products as it was made and thus prevent, as much as possible, the over-grinding of the ore with its consequent fragmentation of the scheelite to a degree that would cause excessive losses in the subsequent beneficiation of the ore. The various sizes in the chart above were then tabled separately for the recovery of

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as much of the scheelite as possible in a concentrate with an accompanying tailing for recrushing, and return to the circuit and the formation of a tailing to waste. The same procedure was followed in the subsequent classified feed of the other sashes. The tailing of the -20 plus 30 mesh indicated that there were excluded values in the coarser mesh. An analysis of this concentrate showed but slightly over 1% WO_3 indicating that the mass of the scheelite was in the finer sashes.

The second classified feed treated on the table was -30 plus 40 mesh. The concentration of this product showed that the bulk of the values was in this range. A rougher concentrate was made which analyzed 4%.2% WO_3. It is my opinion that this rougher product could be raised to at least 20% WO_3 by recleaning. We stressed recovery rather than grade of concentrate solely because of the limited amount of products available for re-cleaning.

The third product fed to the table was -40 plus 150 mesh. In this tabling some losses were made and were attributable to the fineness of the product. All of the small tailings from the various classified tailings were collected into a combined tailing which analyzed 0.1%, equivalent to more than 90% recovery on those coarser sizes. The coarser feed from -10 to plus 20 mesh accounted in a

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considerable secure for this tailing content. Grinding all of the ore to -20 mesh would probably reduce tailing losses materially and increase recoveries.

The slimes were saved and floated with some additional recovery.

As a substitute for flotation, slime tables could be installed for the recovery of the finer scheelite, although perhaps not so effectively.

After working with your ore it is in my opinion that simple metallurgy could be applied to its treatment with a satisfactory over-all recovery of its tungsten values.

I suggest for your Pilot Sheet -

(1) Stage crushing using either a gyratory or jaw type crusher followed by rolls as a secondary grinding medium.

(2) Vibratory screens in circuit with the rolls and the preparation of a classified feed of at least three sizes.

I furthermore suggest that all screen products as they pass 20 mesh be eliminated from the grinding circuit and be tabled separately. All of the feed should be ground to -20 mesh. By eliminating the finer mesh by screening they will not be subjected to unnecessary grinding while the oversize is being brought down to the proper mesh.

Even with the use of rolls as a secondary grinder some slimes will be made and they should be removed by

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classification and treated separately either by flotation or slime tables.

I understand from you that you have purchased some used equipment in hope of a customer for a mill. In looking over the list of equipment submitted by you, apparently all of this machinery could be utilized in the construction of a mill. No sizes are given for the crusher, or rolls, therefore I cannot determine the capacity of those grinding machines. If they are large enough for 100 tons daily capacity you could have a good start toward an efficient mill.

If the method of beneficiation herein suggested is followed, you could have a mill involving simple machinery, with a feed reduced to -20 mesh by stage grinding together with vibratory screens and efficient tables for efficient concentration. Thus a mill with a low capital investment could be anticipated.

In studying the list of machinery which you have submitted, the size type jaw crusher may not crush the roll feed sufficiently fine to produce a mesh 20 mesh product without the use of a set of finishing rolls. This should be borne in mind in obtaining necessary additions to the equipment you have acquired. Moreover, the condition of this

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equipment should be established to prevent the separation from boosting burdens.

Assuming that the equipment you now possess is suitable in size and condition for a plant of say 100 tons daily capacity, it is possible that this machinery could be set in place and necessary additions made for perhaps $37,000. Thus, in my opinion, from $7,000 to $10,000 should be provided for in exploring your development and the erection of a mill, provided the development warrants its construction. The results of the mine development will determine the optimum plant capacity.

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