UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE

Terminated ~~(or cancelled)~~ without certification. DMEA No. 2353

This is the official contract file containing all official records of the project. Duplicate material has been removed. The records contained in the files are checked and are arranged in this manner:

Left Side

✓ Certificate of Audit (Final).

Interim Audit(s).

Report of Review.

✓ Closing Letter

Termination Notice or Agreement.

Recision Notice.

Assignment of Contract.

Contract Amendments (latest on top).

✓ Contract with all exhibits and annexes.

Owner's Consent to Lien.

Subordination Agreement.

Leases and assignments of leases.

Application and attachments.

Schedule of Collections.

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

Right Side

Project summary.

✓ Work completed analysis.

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

✓ Final Field Team Report. (Tab)

Operator's Final Report.

✓ Interim Reports.

✓ On-site Exam Report(s). (Tab)

Settlement Sheets.

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

Maps in folder number _____

Operator's Monthly Reports in folder number _____

wb

Reviewer's Initials

7973

LIBRARY OF THE DIVISION
Defense Minerals Administration
DMEA
NOV 5 1952

DEFENSE MINERALS EXPLORATION ADMINISTRATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

AUDIT CERTIFICATE

I have examined the records and transactions:

Sweeney Tungsten Company, Ltd.

Fullerton, California

pertaining to Exploration Project Contract No. Idm-E336, Docket No. DMEA-2353, for the period of June 20, 1952 to August 18, 1952, and covers a final audit of this project.

My examination was made in accordance with generally accepted standards applicable in the circumstances.

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

Total Cost as Billed by Contractor	$3,944.05
Exceptions	None
Total Accepted Cost	$3,944.05

The contract calls for a 75 per cent participation of exploration expenses by the United States Government. Therefore, payment to the contractor by the Government in the amount of Two Thousand Nine Hundred Fifty Eight and 03/100 Dollars

- $2,958.03 -

is valid and proper.

This certificate is issued on the provision that the Regional Executive Officer, the Administrator, or other competent official has accepted or will accept the project as having otherwise met the terms of the contract.

George Mayor
George Mayor
Auditor

October 29, 1952

I INTRODUCTION

On October 14, 1952, a final audit (covering the period of June 20, 1952 to August 18, 1952) was made of the records and accounts of operations pertaining to Contract No. Idm-E336, Docket No. DMEA-2353 with the:

Sweeney Tungsten Company, Ltd.
Fullerton, California

covering a project of exploration for Tungsten.

The Sweeney Tungsten Company, Ltd., is a partnership comprised of the following individuals:

Earl G. Sweeney, General Partner
Elmer Tubbs, Limited Partner
Floyd A. Tubbs, Limited Partner
H. Everett Jones, Limited Partner
J. A. Fleming, Limited Partner

The accounting records under this contract are located in the home of Mr. Earl G. Sweeney, 1508 West Commonwealth Street, Fullerton, California. During the course of the audit, Mr. Earl G. Sweeney was present and his cooperation and assistance greatly facilitated the audit.

II GENERAL INFORMATION ON RECORDS

The accounting records maintained were adequate to properly account for the expenditures made for the exploration project. There was no general ledger, however the check register together with payroll records were sufficient to conduct a satisfactory audit. The MF-104 prepared at the end of each month had all the necessary supporting data attached. The payroll summary had a signed receipt attached for each employee and purchase invoices were either the original or certified copy. All other costs such as depreciation, payroll taxes and compensation insurance allowable under the terms of the contract were detailed in the attachments to the MF-104.

III SCOPE OF AUDIT AND FINDINGS

This being a final audit a complete analysis of all expenditures was made in order to ascertain the accuracy, propriety and

validity of the costs as shown in the "Totals to Date" column of Form MF-104, Operator's Monthly Report and Voucher, for the month of August 1952 as set forth in Exhibit "A" attached. The extent of the audit and the findings under each of the "Items of Cost" are discussed in sequence as follows:

(1) Independent Contracts — - 0 -

Not applicable to this contract.

(2) Labor and Supervision — $2,798.00

The payrolls and supporting data for the period June 20, 1952 through August 18, 1952 were examined and computed for accuracy. The superintendent maintained a daily time book from which he prepared a semi-monthly payroll register. This register contains all the information relating to the payroll, showing name, classification, rate of pay, number of exemptions for withholding tax, other deductions, net amount paid and check number. In addition, each employee signed a payroll slip which showed gross amount earned, less itemized deductions and net amount of check. All salaries and wage rates were paid in accordance with the terms of the contract. The allowable labor and supervision costs were distributed as follows:

Labor	$1,808.00
Supervision:	
Earl G. Sweeney	990.00
Total	$2,798.00

There were two (2) partners on the payroll, Earl G. Sweeney, Supervisor, at $500.00 per month and Elmer Tubbs, General Utility Man, 20 days at $15.00 per day which amounted to $300.00 and is included with labor costs.

(3) Operating Materials and Supplies — $ 370.10

All charges against this category were checked with original invoices or certified copies and included a verification of prices and extensions. The costs were found to be correct and consisted of the following:

Explosives	$ 155.04
Gasoline and Oil	192.96
Other	22.10
Total	$ 370.00

Included in the above were items amounting to $68.05 taken from inventory. The prices used for these inventory items were verified with current invoice prices and found to be correct.

(4) Operating Equipment $ 240.00

The only charge under this category was for depreciation on the following equipment:

		Value
1-1/2	Ton pickup truck	$1,800.00
1	Portable compressor on truck	4,200.00
1	Jackhammer and accessories	500.00
1	Water pump and engine	200.00
	Electric and gas welders	500.00
Total		$7,200.00

The depreciation allowed under the terms of the contract was 1/60 per month of $7,200.00 for two (2) months, amounting to $240.00. This entire amount was charged to depreciation costs and found to be correct for the period June 30, 1952 to August 18, 1952.

(5) Initial Rehabilitation and Repairs - 0 -

Not applicable to this contract

(6) New Buildings, Improvements, etc. - 0 -

Not applicable to this contract

(7) Miscellaneous $ 535.95

The items making up the miscellaneous charges are as follows:

Repairs to Equipment	$ 98.70
Sampling and Analysis	279.00
Payroll Taxes	75.94
Liability Insurance	82.31
Total	$ 535.95

An examination of invoices was made and items verified covering charges for Repairs to Equipment $98.70 and assaying $279.00, all of which were found to be correct. The assaying cost of $279.00 represented 60 samples at $3.00 each by Smith-Emery of Los Angeles, and 33 samples at $3.00 each by Ed Eisenhauer, Jr., Los Angeles. Mr. Earl G. Sweeney explained that it was necessary to have the second analysis

performed by Ed Eisenhauer, Jr. in order to try and prove the grade of tungsten he could obtain from his mining operation. The explanation being feasible and assay costs were within contract allowance, no exception was taken.

All charges for payroll taxes and insurance were checked by computation at the rates shown by the Company's files to be in effect. These rates were:

Social Security Tax	1.5	
Unemployment: California	2.7	4.2%
Workmen's Compensation Insurance		5.47%

The low rate of 5.47% for Workmen's Compensation Insurance was due to surface mining operations for work performed on 35 trenches under Stage I of the contract. The insurance policy was examined and found to be in order.

(8) Contingencies - 0 -

The sum of $170.00 was allowed for contingencies under the terms of the contract. However, no costs were insurred under this category.

IV CONCLUSIONS AND RECOMMENDATIONS

This audit has disclosed that all costs, as charged to this project are reasonable and proper under the terms of the contract.

Due to low grade ore exposed in first stage of contract, and no geologic indication that ore of higher grade would be found, the contract was officially terminated October 1, 1952.

The adjustments between Items of Costs, as shown on the August 1952 MF-104, and approved amounts are summarized as follows:

		Totals Aug MF-104	Distribution Corrected	Disallowed by Audit	Allowed by Audit
(1)	Independent Contracts:				
	Not applicable	- 0 -	- 0 -		- 0 -
(2)	Labor & Supervision				
	Labor	$1,808.00	$1,808.00		$1,808.00
	Supervision	990.00	990.00		990.00
(3)	Operating Mat'ls & Supplies				
	Explosives	130.67	155.04		155.04
	Gasoline and oil	171.38	192.96		192.96
	Other	68.05	22.10		22.10
(4)	Operating Equipment				
	Depreciation	240.00	240.00		240.00
(5)	Initial Rehabilitation and Repairs				
	Not applicable	- 0 -	- 0 -		- 0 -
(6)	New Bldgs., Improvements, etc.				
	Not applicable	- 0 -	- 0 -		
(7)	Miscellaneous				
	Repairs to Equipment	98.70	98.70		98.70
	Sampling & Analysis	279.00	279.00		279.00
	Payroll Taxes	75.94	75.94		75.94
	Liability Insurance	82.31	82.31		82.31
(8)	Contingencies				
	No costs incurred	- 0 -			
TOTALS		$3,944.05	$3,944.05	NONE	$3,944.05

At the conclusion of the audit, the findings were discussed with Mr. Earl G. Sweeney, Superintendent of the project.

October 29. 1952

George Mavon

George Mavon
Auditor

FILE COPY
SURNAME:

Rutledge
Martin

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

FEB 12 1953

Mr. Earl G. Sweeney
Sweeney Tungsten Company, Ltd.
1508 W. Commonwealth
Fullerton, California

Re: Docket No. DMEA 2353 - Tungsten
Sweeney Tungsten Company, Ltd.
Rainbow No. 1 and No. 2 Claims
Riverside County, California
Exploration Contract No. Idm-E-336

Dear Mr. Sweeney:

This is with reference to the subject exploration project contract between Sweeney Tungsten Company, Ltd. and the Government.

The final audit of the contract expenditures has been received and accepted by this Administration. Of the total amount of $4,800.00 approved under Stage I of the contract, total contract $29,800.00, the amount of $3,944.05 was expended and the Government's share of 75 percent, or $2,958.03, was disbursed. There were no unused material, supplies, or equipment to be disposed of for the joint account of the Operator and the Government. The work was completed in a satisfactory manner.

Because the results of the exploration project were unfavorable, the contract was terminated after completion of Stage I. It is, therefore, not our intention to make any certification of discovery or development which would create a lien against the project property, and we are, therefore, closing our books and records with respect to this project. Your attention is called, however, to Article 7d of the contract which requires the Operator to "keep and preserve his records and accounts for a period of three years after the completion or termination of this contract".

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

Sincerely yours,

G. O. Mittenzwei (for)

Administrator

2-12-53

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

FARutledge/hhb

2/11/53

Government Copy
MEA-2436
Idm-E334
22364-3
Cobalt, Copper

APPROVAL OF SUBCONTRACT
(Under Form MF-200 prior to
revision of February 1952)

To: Northfield Mines, Inc., Cobalt Exploration Syndicate, Salmon, Idaho
(Name of Operator)

That certain contract, or proposed contract, a copy of which you have submitted with your request for approval, dated July 10, 1952, between you and Nichols & Thompson Core Drilling Company, Boise, Idaho
(Name of Independent Contractor)
for the performance of the following work: diamond drilling

which is all or a specific element of the work described in an Exploration Project Contract dated June 2, 1952, Idm E 344, Docket No. DMEA 2436, is hereby approved by the United States of America, subject to the following terms and conditions.

1. The Government shall not be nor be considered to be a party to said 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 said independent contract.

2. Regardless of the provisions of said 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.

3. The said independent contract shall not have the effect of increasing the estimated total cost of the exploration project contract or the maximum amount which the Government will pay as provided in the exploration project contract.

Dated: July 10, 1952.

THE UNITED STATES OF AMERICA

By Glenn A. Reed
for M. E. Volin, Acting Exec. Officer
DMEA Field Team, Region II
(U. S. Bureau of Mines)

CONTRACT

Between: NICHOLS & THOMPSON CORE DRILLING CO., INC.,

First Party

and

NORTHFIELD MINES, INC., COBALT EXPLORATION SYNDICATE,

Second Party,

THIS AGREEMENT, made and entered into this 10th day of July, 1952, by and between NICHOLS & THOMPSON CORE DRILLING CO., INC., hereinafter called first party, and NORTHFIELD MINES, INC., COBALT EXPLORATION SYNDICATE, hereinafter called second party,

WITNESSETH:

WHEREAS, Second party has requested first party and first party has agreed to perform certain drilling and other services under the terms and conditions hereinafter specified;

NOW, THEREFORE, for and in consideration of the covenants, conditions and agreements herein contained, the parties agree as follows:

FIRST: The first party agrees:

1. To drill or cause to be drilled diamond drill holes on drill sites at such depths, bearings, inclinations and hole sizes as designated by the second party. Said drilling is to be performed on mining property of second party in the Blackbird Mining District, Idaho.

2. To supply all drilling equipment, tools, labor, materials and supplies, except hereinafter provided, required to complete such holes.

3. That the drill crews of first party will prosecute the drilling in a diligent, expert and workmanlike manner and shall exercise reasonable care and precaution to recover as high a percentage of core and sludge as the nature of the ground will permit and will deliver over all such core and sludge at the drill site to the person or persons designated by second party. Further, first party agrees to resort to all recognized coring techniques to maintain said core recovery at a maximum.

4. To furnish and place 500 linear feet of drill water piping per site, and pump such water to drill site under a maximum head of 250 feet.

5. That the cost of any delays in drilling due to drill machine failure, loss of tools in hole or any other mechanical breakdowns will be borne solely by the first party.

6. In the event of a delay caused by "ground trouble" the first party shall diligently try to overcome said hole trouble for a period of 6 - eight hour drill shifts and then, if the second party still desires to continue the hole, the second party will pay the first party, instead of the per foot rate, a rate of $ 85.00 G.W.M. by J.B. A.P.N. per eight hour drill shift until said hole trouble is overcome.

7. To drill a minimum of 550 feet per month with one drill on a two shift basis, provided, that in the event this minimum footage can not be maintained, the first party may use additional drills and work additional shifts at its discretion to maintain the minimum monthly footage. If first party desires to drill in excess of ~~550~~ 1000 feet per month, the written consent of the second party must first be obtained. G.W.M. by J.B. A.P.N.

8. To carry adequate Workmen's Compensation and Employer's Liability insurance to cover the work and to observe and obey Federal, State and local laws concerning the work to be performed.

9. To indemnify and save harmless the second party from laborer's, mechanic's, materialmen's liens and all other liens and charges upon the operation and/or upon the premises upon which work is located, arising out of the operations to be performed and materials furnished by the first party under this agreement.

10. To transport its crews to and from the PROPERTY OF SECOND PARTY at its own expense.

11. To commence work within a reasonable length of time after the execution of this agreement and shall pursue the work in a consistent manner until completed.

12. To permit the second party's authorized representatives to observe and inspect the work being performed in order that the purpose for which the holes are being drilled, exploration for minerals, be accomplished

to the second party's satisfaction. The second party agrees that its inspections and observations will be done, insofar as possible, so as to cause a minimum of delay to the first party.

13. To keep secret and confidential all information regarding the geology of ore bodies and not to disclose the same to anyone other than the duly authorized representatives of the second party.

SECOND: The second party agrees:

1. To give the first party and his employees access to the premises upon which the drilling operations are to be conducted at no cost to the first party.

2. To guarantee the first party a total of 1250 feet.

3. To prepare drill sites, roads to drill sites and provide slash lines or permit use of present trails or roads for laying of pipe.

4. To designate drill sites, bearing and inclination of holes and to arrange the sequence of drilling so that the first party will have a reasonable minimum of moving distances and lost time between sites.

5. To pay the first party at the following rates:

(a) NX size	0 to 200 feet	@	$5.90 per linear foot
(b) BX size	0 to 200 feet	@	$5.35 per linear foot
(c) AX size	0 to 250 feet	@	$5.00 per linear foot
(d) Reaming		@	$2.50 per linear foot
(e) Cementing		@	$2.50 per linear foot
(f) Driving surface pipe		@	$8.40 per linear foot
(g) Mobilization (all equipment in & out)		@	$325.00

Further, measurement of hole shall be from collar of holes and no hole shall exceed 250 linear feet unless desired by the second party, in which event, such drilling shall be performed under conditions and at such rates as may be agreed upon in a written instrument supplemental to the within agreements.

6. In case of abandoment of a hole the first party will be paid for footage drilled at the rates herein specified.

7. To pay the first party on the 5th and 20th of each month for footage completed and verified by the second party's engineer, said completed footages to be submitted by the first party for verification on the

1st and 16th of each calendar month.

8. To save harmless and indemnify first party's operation for and against any undue delays due to second party's actions at the rate of $10.00 per hour. Delays caused by the conducting of engineering surveys of holes will be paid for at the above stated rate.

9. To furnish all core boxes and sludge sample containers needed by first party in performance of this contract.

10. To furnish first party with one 14 x 16 foot tent house erected at or near the job site, said tent house to remain the property of second party and first party agrees to pay $5.00 per month rental during the time it uses said tent house.

11. That upon completion of drilling the first party shall have the right to remove, within a reasonable length of time, all temporary buildings and other fixtures, trade fixtures, machinery, equipment, appliances and facilities placed by him on second party's real property.

THIRD: It is mutually understood and agreed by and between the parties hereto as follows, to wit:

1. That the cost of any casing INADVERTENTLY left in any hole drilled hereunder shall be shared by first and second parties on a 50-50 basis. In the event second party should desire to leave casing in a hole it is agreed that second party be charged the current replacement cost of said casing.

2. That neither party to this agreement shall be liable for any loss or damage caused by reason of strikes, accidents, acts of God, action of the elements, or any other causes beyond its control.

3. That no representations, promises, agreements or understandings other than those contained herein shall be binding upon the parties hereto, except where the same are set forth under a written instrument supplemental to or superseding the within agreement and such instrument shall be duly executed by the parties hereto.

4. That this contract shall be subject to approval by the proper authorities of the Defense Minerals Exploration Administration of the Federal Government.

5. Any notice required to be given by second party shall be in writing and shall be properly given if such writing is delivered personally

to or mailed by registered mail addressed to the first party as follows:

Nichols & Thompson Core Drilling Co., Inc.
c/o Alvin P. Nichols
Route 9
Boise, Idaho

Any notice required to be given by first party shall be in writing and shall be properly given if such writing is delivered personally to or mailed by registered mail addressed to second party as follows:

Cobalt Exploration Syndicate
General Delivery
Salmon, Idaho

6. That if at any time during the life of this contract any dispute, difference or question shall arise between the parties hereto, touching the construction, meaning or effect of this contract, or any clause or thing herein contained, or respective rights or liabilities of the parties under these presents, every such dispute, difference or question shall at the request of either party be referred to the arbitration of three persons, one to be appointed by each party hereto, and the third to be selected by the two thus appointed; and the award and decision of the three arbitrators thus selected shall be binding upon the parties hereto. In the event either party is required to resort to legal action to enforce any of the provisions of this contract, he shall be entitled to recover reasonable attorney's fees incurred thereby.

7. This agreement shall be binding upon and shall inure to the benefit of the heirs, executors, administrators and assigns of the parties hereto; provided, that neither party hereto shall assign his rights in or interest under this contract without first having obtained the other party's consent to such assignment in writing.

IN WITNESS WHEREOF This contract has been executed in triplicate by the parties hereto the day and the year first herein written.

NICHOLS & THOMPSON CORE DRILLING CO., INC.

Alvin P. Nichols
President

ATTEST: _____
Secretary

NORTHFIELD MINES, INC.
COBALT EXPLORATION SYNDICATE

Noun Mitchell
General Manager

ATTEST: _____

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

DOCKET NO. [redacted]EA 2353

COMMODITY Tungsten

Idm-E336

GOVERNMENT'S COPY

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

EXPLORATION PROJECT CONTRACT [1]

IT IS AGREED this 6th day of June, 1952, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and [2] Sweeney Tungsten Company, Ltd., a partnership composed of Earl G. Sweeney, Elmer Tubbs, Floyd A. Tubbs, H. Everett Jones, J. A. Fleming, 1508 W. Commonwealth, Fullerton, California.

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 California, County of Riverside, described as follows: [3] Rainbow No. 1 and No. 2 unpatented claims recorded in Book 994, pp. 390, 391, 387 and 388 respectively, Riverside, California, and the unpatented Lucky Penny claim recorded in Book 1178, page 352, Riverside, California. These claims are 8.5 miles S. 15° W. of Desert Center, California in the Chuckawalla Quadrangle (see attached areal map).
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*) [redacted]
The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof.

ARTICLE 3. *Exploration project.*—The Operator, within ~~forty-five~~ (45) 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 twelve months from the date of this contract. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

ARTICLE 8. *Payments by the Government.*—(*a*) The Government will pay 75 percent of the allowable costs incurred, as they accrue, in an aggregate total amount not in excess of $22,350.00, which is 75 percent of $29,800.00, 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.* _____

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C. P. Mitteudorf
Acting Administrator, Defense Minerals Exploration Administration

Sweeney Tungsten Company, Ltd.
(Operator)

By Earl G. Sweeney
Genl. Partner

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

EXPLORATION PROJECT CONTRACT
SWEENEY TUNGSTEN CO., LTD.
RAINBOW NO. 1 & No. 2 CLAIMS
DOCKET NO. DMEA-2353

EXHIBIT "A"

Description of the Work

This exploration will be divided into two stages; the first stage consisting of surface trenching, and the second stage consisting of underground work.

Stage I

Time Schedule: 0 - 2 months

This work consists of 35 trenches, at intervals of approximately 50 feet along the vein (see attached sketch map). These trenches shall be about 15 feet in length, 3 feet in width and 3 feet in depth in the vein.

The sampling in the above trenches shall be carried out in a manner approved by the Government. Each sample shall be divided into two parts, one to go to the Field Team and the other to the Operator.

Stage II

Time Schedule: 3 - 7 months

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

The work of Stage II will consist of about 800 feet of underground work. The exact locations and types of this work shall be mutually agreed upon by the Operator and representatives of the Government and described in an amendment of Exhibit "A" which shall be executed and attached to this contract prior to the performance of any of the work under Stage II.

Estimated Costs of the Project
(*Indicates allowable maximum)

Stage I

(1) Independent Contracts

None

(2) Labor, Supervision, Consultants

1 - Supervisor @ $500.00/mo., 2 mos.*	$1,000.00*	
1 - Machineman @ $15.00/day, including overtime, 40 days	600.00	
1 - Mucker @ $14.00/day, including overtime, 40 days	560.00	
1 - Sampler @ $14.00/day, including overtime, 40 days	560.00	
1 - General utility man @ $15.00/day, including overtime, 40 days	600.00	$ 3,320.00*

(3) Operating Materials and Supplies

Supplies (Fuel, oil, tools, powder, caps, fuse, and miscellaneous)	380.00*

(4) Operating Equipment

To be rented:

None

To be purchased:

None

Owned by Operator:

	Value
1 - 1/2 ton pickup truck	$1,800.00
1 - Portable compressor on truck	4,200.00
1 - Jackhammer and accessories	500.00
1 - Water pump and engine	200.00
Electric and gas welders	500.00
	$7,200.00

Depreciation, 2 mos. 1/60th per mo. 1/	240.00*

1/ The monthly depreciation allowance is chargeable only for the months in which the Operator's equipment is used for the benefit of the project.

(5) Rehabilitation and Repairs

None

(6) New Buildings, Improvements and Installations

None

(7) Miscellaneous

Repairs	$ 100.00	
Assaying, 70 samples @ $4.00	280.00	
Accounting	50.00	
Compensation insurance, Social Security, Employees' Liability Insurance, etc.	260.00	$ 690.00
(8) Contingencies		170.00
Total cost of Stage I		$ 4,800.00*

Stage II

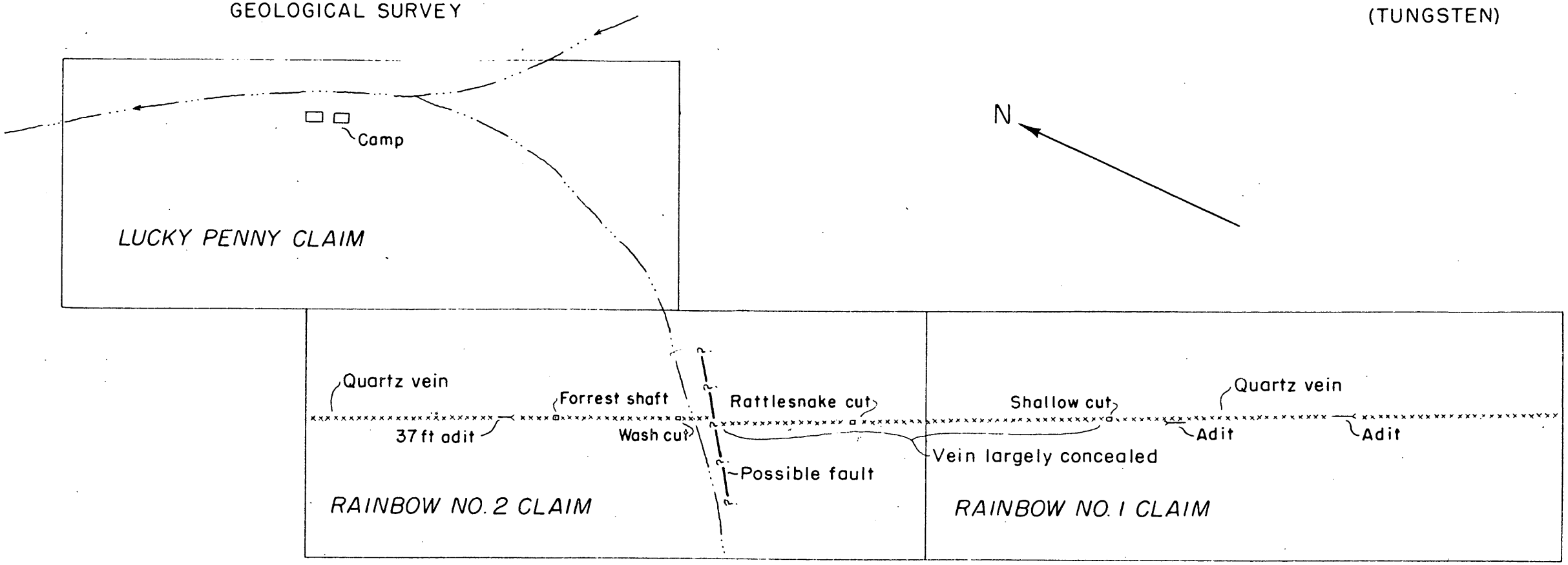
Thisstage consists of about 800 feet of underground work at an average cost of $25.00 per foot for drifting and $45.00 per foot for sinking. $25,000.00*

The total aggregate amount specified for this stage shall be scheduled in the amendment of this Exhibit "A", referred to above, prior to the performance of any work under this stage.

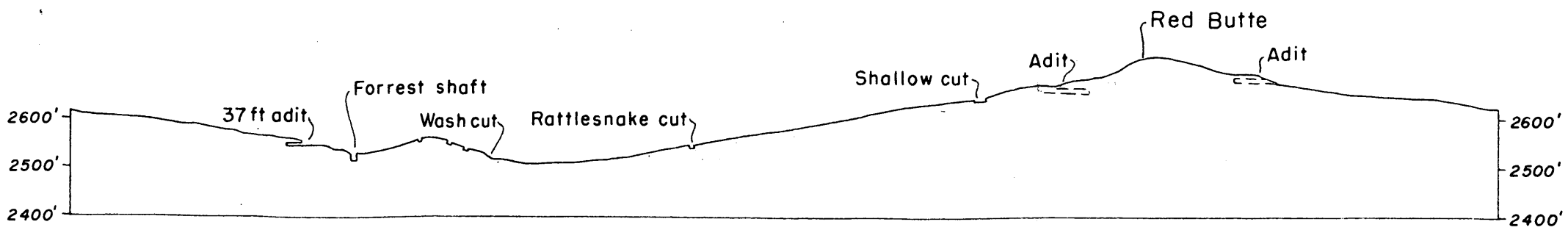
Total Cost of project	$29,800.00*
Government participation at 75%	$22,350.00*

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DMEA 2353
(TUNGSTEN)



SURFACE PLAN

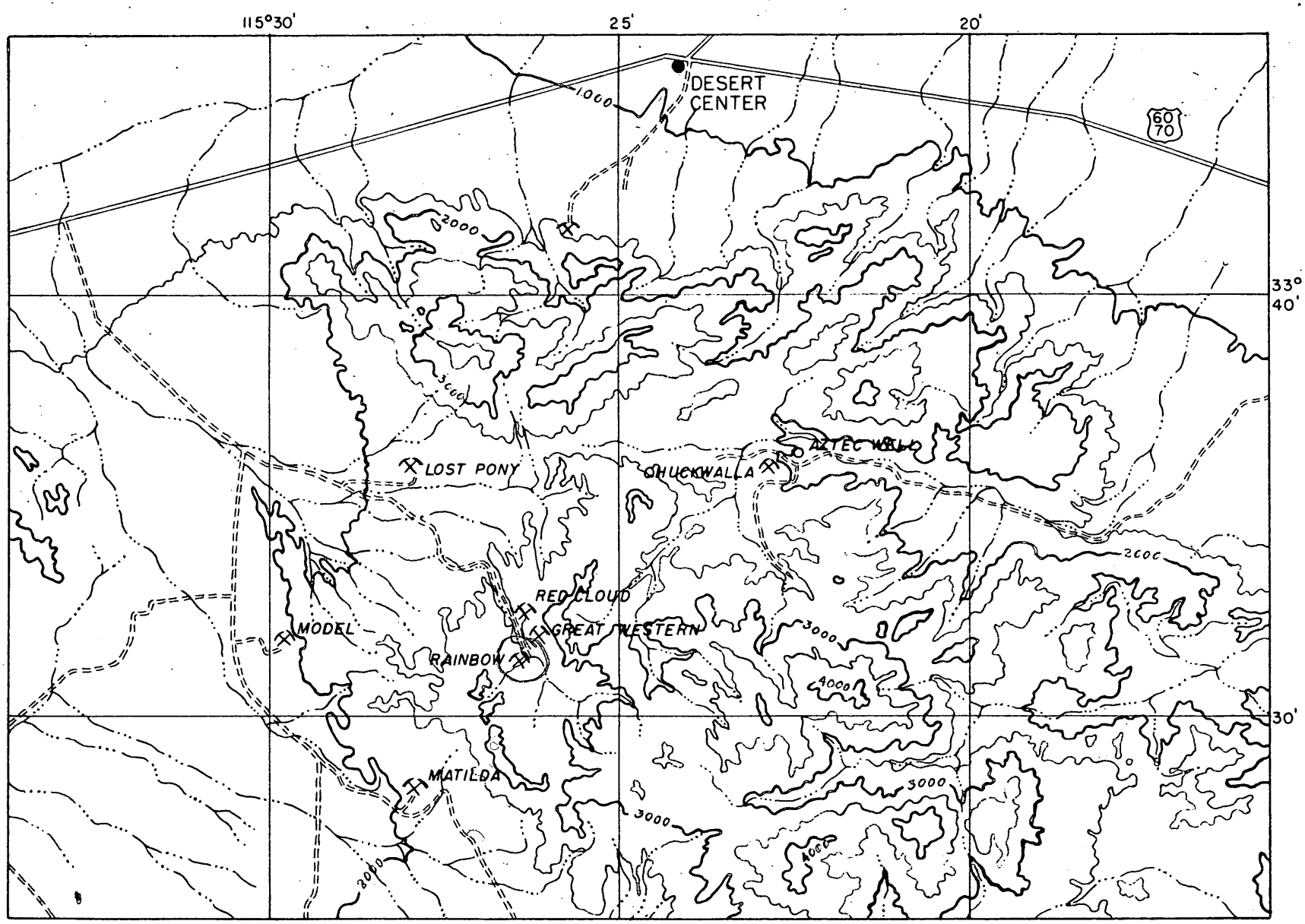


LONGITUDINAL PROJECTION OF VEIN

Modified after L.C. Penhoel
March, 18, 1952

SKETCH MAP OF RAINBOW TUNGSTEN PROSPECT, RIVERSIDE COUNTY, CALIFORNIA

0 300 600 900 Feet



Modified after Chuckwalla Mtns. and Canyon Spring Quadrangles

0 1 2 3 4 5 MILES

Contour interval 500 feet

MAP OF CHUCKWALLA MOUNTAINS, RIVERSIDE COUNTY, CALIFORNIA, SHOWING LOCATION OF TUNGSTEN PROSPECTS

Deed to Mining Claims

QUITCLAIM

THIS INDENTURE, *made the* 27th *day of* May, *19* 52
BETWEEN

EARL G. SWEENEY

the part y *of the first part,*

AND SWEENEY TUNGSTEN CO., a limited partnership, organized and existing under the laws of the State of California, Certificate of Formation of which is Recorded in Book 1324, Page 348 of Official Records in the Office of the Recorder of Riverside County, California,

the part y *of the second part,*

WITNESSETH: *That the said part* y *of the first part, for and in consideration of the sum of* One and no/100 -------- ($1.00) ---------- *Dollars, lawful money of the United States of America, to* him *in hand paid by the said part* y *of the second part, the receipt whereof is hereby acknowledged, has remised, released and forever quitclaimed, and by these presents do* es *remise, release, and forever quitclaim, unto the said part* ___ *of the second part, and to* its ~~*heirs and assigns,*~~ successors and assigns, the following described lode claims situated in the Chuckawalla Mining District, Riverside County, California, to wit:

The Rainbow No. 1. location notice of which is recorded in Book 994, pg.387
The Rainbow No. 2. " " " " " " " " 994, " 390, and
The Lucky Penny " " " " " " " " 1178, " 352 of
Official Records in the Office of the Recorder of said County.

TOGETHER *with all the Dips, Spurs and Angles, and also all the metals, ores, gold and silver bearing quartz, rock and earth and kindred mineral substances therein; and all the rights, privileges and franchises thereto incident, appendant and appurtenant, or therewith usually had and enjoyed; and also, all and singular, the tenements, hereditaments and appurtenances thereunto belonging, or in any wise appertaining, the rents, issues and profits thereof; and also the estate, right, title, interest, property possession, claim and demand whatsoever, as well in law as in equity, of the said part* y *of the first part, of, in or to the said premises, and every part and parcel thereto with the appurtenances,* including all water rights in connection therewith.

TO HAVE AND TO HOLD, *all and singular the said premises, together with the appurtenances and privileges thereunto incident, unto said part* y *of the second part.*

IN WITNESS WHEREOF, *the said part* y *of the first part ha* s *hereunto set* his *hand* ___ *and seal* ___ *the day and year first above written.*

Earl G. Sweeney

STATE OF CALIFORNIA
COUNTY OF Los Angeles } SS.

On May 27, 1952, before me, the undersigned, a Notary Public in and for said County and State, personally appeared

Earl G. Sweeney

known to me to be the person ___ whose name is subscribed to the within instrument and acknowledged that he executed the same.

WITNESS my hand and official seal.

(Seal) Mary B. Gedland
Notary Public in and for said County and State.
My Commission Expires July 25, 1955

SPACE BELOW FOR RECORDER'S USE ONLY

ORDER NO.....

When recorded, please mail this Instrument to

No.....

Deed to Mining Claim

QUITCLAIM

.....

.....

To

.....

.....

DATED ....., 19.....

CERTIFICATE OF FORMATION OF

SWEENEY TUNGSTEN CO.

A Limited Co-Partnership

We, the undersigned, do hereby swear and certify that we have formed and constitute a limited co-partnership under the laws of the State of California, and that

I. The name of said partnership is and shall be SWEENEY TUNGSTEN CO.

II. The character of the business of said partnership is and shall be mining.

III. The location of the principal place of business of said partnership shall be at the Rainbow Mine, which is situated about forty miles southeast of Indio, in the County of Riverside, State of California, and its post office address is General Delivery, Indio, California.

IV. The general partner of said partnership is EARL G. SWEENEY, who resides at 1508 West commonwealth, Fullerton, California, and the limited partners of said partnership are ELMER TUBBS, who resides at 516 Eye Street, Bakersfield, California; FLOYD A. TUBBS, who resides at 1108 Tulare Street, Station A, Bakersfield, California; H. EVERETT JONES, who resides at 1819 Coldwater Canyon Drive, Beverly Hills, California; EARL G. SWEENEY, who resides at 1508 West Commonwealth, Fullerton, California, and J. A. FLEMING, who resides at 16916 Parthenia Street, San Fernando, California.

V. The term of said partnership is to exist from the proper recording and filing of this certificate according to law until December 31, 1961, unless sooner terminated or dissolved by order of court, the proper filing and recording of a certificate

of dissolution made by the parties or their survivors, or the death, retirement or adjudication of incompetency of the last surviving general partner; provided, however, that upon the death of the last surviving general partner the limited partners shall have sixty days from the date of such death within which to elect in writing to continue the partnership and its business and to designate or appoint one or more of their number to act as general partner or general partners hereunder until December 31, 1961, or in the alternative dissolve and wind up this partnership.

VI. The limited partners who have contributed or agreed to contribute cash in the following amounts appearing after their names, are, viz:

Floyd A. Tubbs	$10,000.00

The limited partners, ELAS TUBBS, A. EVERETT JONES, EARL C. [illegible], and J. A. FLEMING, have contributed or will contribute all their right, title, and interest in and to the following described real and personal property, to wit:

(a) That certain mine consisting of unpatented mining claims known as the Rainbow Mine, situated about 40 miles southeast of Indio, California, in the County of Riverside, and

(b) Certain mining machinery, equipment and tools, and certain machinery, equipment, tools, and materials for milling,

all of which property it is agreed have a value of not less than than ninety thousand dollars ($90,000.00).

VII. The limited partners have not agreed and do not agree to make any further and additional contributions to said partnership.

VIII. The contribution of each limited partner shall be returned out of and from net profits of the partnership as and when the same are realized and become distributable by the general partners as hereinafter provided or upon dissolution of the partnership for any cause.

IX. The shares of the profits or other compensation by way of income which each limited partner shall receive by reason of his contribution are as follows:

Earl C. Sweeney	64%
Elmer Tubbs	20%
Floyd A. Tubbs	10%
H. Everett Jones	5%
J. A. Fleming	1%

The general partner may in addition to his aforesaid share of profits receive such reasonable amounts from the partnership's earnings as compensation for his services as the general partner as he would pay to persons not partners for such services rendered to the partnership, and the general partner may pay any limited partner in addition to the aforesaid shares of profits as compensation for any services which any limited partner is qualified and able to render to the partnership as the general partner would be obliged to pay a person not a partner for such services.

X. The limited partners may transfer and assign or transfer as collateral their right as limited partners to receive a share of the partnership's net earnings without the consent of the remaining partners, but no limited partner may assign all or any part of his limited partner's interest in the partnership and substitute another in his place and stead as such limited

partner as to the whole or any part of his limited partner's interest without the written consent of all the partners and in accordance with the provisions of Section 15519 of the Corporations Code of the State of California.

XI. Additional limited partners or additional general partners may be admitted to said partnership with and by the written consent of all of the partners.

XII. No limited partner or partners shall be entitled to any preference over his limited co-partners in demanding or receiving a return of his contribution.

XIII. Upon the death, retirement, or adjudication of incompetency of a general partner any remaining general partner or partners may continue the business of the partnership.

XIV. No limited partner shall have the right to receive property of the partnership other than cash in return of his contribution.

Dated December _____, 1951.

_____
Earl C. Sweeney

_____
Elmer Tubbs

_____
Floyd A. Tubbs

_____
H. Everett Jones

_____
J. A. Fleming

State of California,)
(ss.
County of Los Angeles.)

The foregoing certificate of formation of a limited partnership was certified to, sworn to, and subscribed before me by Earl G. Sweeney, H. Everett Jones, and J. A. Fleming, at Los Angeles, California, on December 4, 1951.

Notary Public in and for the County of Los Angeles, State of California. My Commission expires July 25, 1955.

State of California,)
(ss.
County of _____)

The foregoing certificate of formation of a limited partnership was certified to, sworn to, and subscribed before me by Elmer Tubbs and Floyd A. Tubbs, at _____, California, on December _____, 1951.

Notary Public in and for the County of Los Angeles, State of California. My Commission expires _____19___

State of California,)
(ss.
County of Los Angeles.)

On this _____day of December 1951, before me, a Notary Public in and for the County of Los Angeles, State of California, residing therein, duly commissioned and sworn, personally appeared Earl G. Sweeney, H. Everett Jones, and J. A. Fleming, known to me to be the persons whose names are subscribed to the within instrument, and acknowledged to me that they executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year first above written.

Notary Public in and for the County of Los Angeles, State of California. My Commission expires July 25, 1955.

State of California,)
(ss.
County of _____)

On this _____day of December, 1951, before me, a Notary Public in and for the County of _____, State of California, residing therein, duly commissioned and sworn, personally appeared Elmer Tubbs and Floyd A. Tubbs, known to me to be the persons whose names are subscribed to the within instrument, and acknowledged to me that they executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year first above written.

Notary Public in and for said County and State. My Commission Expires_____, 19____

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-2353
Metal or Mineral
Date Received 1-28-52
Amount $
Participation (Government %)

SWEENEY TUNGSTEN CO. LTD.
1508 W. Commonwealth
Fullerton, Calif.

Name and address of applicant

Date Jan. 23, 1952

If you have already filed MF-100, give date filed Nov. 13, 1951, type of assistance requested MF 101 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.

RECEIVED
JAN 28 1952
DEFENSE MINERALS ADMINISTRATION

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

   (*a*) Rented

   (*b*) Purchased

   (*c*) Furnished by you

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

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

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

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

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

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

CERTIFICATION

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

(Name of company)	By (Signature of authorized official)
(Date)	(Title)

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

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

SWEENEY TUNGSTEN CO. LTD.
1508 W. Commonwealth
Fullerton, Calif.

1. (a) Description

Rainbow #1 and Rainbow #2 Mines
(Same as "c")

(b) Ownership

We are the owners of these properties.

(c) Legal Description

Rainbow #1

#1948
Filed July 5, 1948
Received for Record July 15, 1948
Copied in Book #994
Official Records Pages #390 and #391

Rainbow #2

Filed July 5, 1948
Received for Record July 15, 1948
Copied in Book #994
Official Records Pages #387 and #388

These are unpatented claims located in the Chucawalla Mountains, Riverside Co., Calif.

They are about six miles northerly from the Maltilda Tungsten Mine, and about 1 miles southerly from the Red Cloud Mine. About 50 miles southeast of Indio, Calif.

SWEENEY TUNGSTEN CO. LTD.
1508 W. Commonwealth
Fullerton, Calif.

2. (a) Minerals

I have scheelite on the property and the Exploration Project will be to develop additional tonnage.

(b) Geological Features

Enclosed.
These need not be returned.

Lafayette 4598

Consulting Engineer

K. M. FLETCHER
2503 Palm Place
Huntington Park, Calif.

MINE EXAMINATION.

December 3rd, 1951.

Rainbow Mining Claims, a tungsten prospect.

FOR: Mr. Earl G. Sweeney, Fullerton, California.

PROPERTY.

Consists of 3 unsurveyed mining claims or approximately 60 acres located in the Red Cloud Mining District, Chuckawalla Mountains, Riverside County, California.

TITLE. No search of title was made.

SITUATION.

The property is situated 10 miles south of Highway 60 from a point approximately 11 miles East of Shavers' Summit, a gas station between Indio and Blythe.

The 10 miles of road off the Highway is a desert road with no grades. The last 2 or 3 miles is up a sand wash and with this part of the road realigned, a good serviceable road for all traffic can be maintained.

The topography of the area is rough but not abrupt and roads to any part of the property can be made at small cost.

Water can be made available for all domestic and plant purposes considered at this time. The Red Cloud Mine, not operating, about a mile distant would be a source for a substantial, but unknown supply. Water holes and springs within a mile or so of the property assure a sufficient supply for anticipated needs.

GENERAL GEOLOGY:

The region is one of tilted lime beds. The property and Rainbow vein is on the last flank of a mountain formed by erosion of tilted beds of white limestone striking generally N. & S. and dipping West. The Rainbow vein is a fissure with well defined walls. The average width appears to be about 12 feet. At places, widths to 20 and 30 feet exist. The outcrop of the vein is prominent except where covered by overburden for short distances and can be traced for the full length of the property or approximately 3500 feet. The vein fill is silicified limestone and quartz. The tungsten mineral Scheelite is present associated with silicified limestone quartz and magnetite as the principal gangue minerals.

Lafayette 4598 Consulting Engineer

K. M. FLETCHER
2503 Palm Place
Huntington Park, Calif.

ORE OCCURRENCE:

From the present prospect workings, scheelite, as crystals to 1/4 inch occurs generally in the altered limestone, with the black manganese stained limestone in the South section of the property carrying the larger crystals.

From the exposures in the present prospect holes, there are at least three areas which show concentration of scheelite. One is under the Red Butte area, another is what is called the 65 foot outcrop and the other is the area of the open cut where the start of an ore stock pile was made. The work in progress, of starting a prospect shaft called the Forrest Shaft is 11 feet deep. A sample across 7 feet at the bottom of the West section assayed .17% WO_3. The adjoining 2 feet East section assayed .15% WO_3. The vein is vertical.

A random chip sample from the coarse rock on the "stock pile", assayed .30% WO_3 and the calculated assay from the products of beneficiation tests was .44% WO_3.

TONNAGE:

Exposures of ore have been made along 1700 feet of the total length of the outcrop of approximately 3500 feet. These prospect holes range from the lowest point, "ore dump" on map to the highest point, "Red Butte", which is 225 feet above the ore dump. This gives an average depth of 112 feet along the 1700 feet length. With an average width of 12 feet, there are approximately 200,000 tones of ore in sight.

The same condition should prevail along the entire length of the outcrop, thus giving a good possibility of an additional 200,000 tons.

The geology shows the vein dipping west toward the main range, from which the scheelite enrichment originally came, thus indicating great depth with good prospects for a very large ore body.

BENEFICIATION TESTS:

Tests by gravity concentration to date indicate that a mesh of grind of minus 30 is required to free the scheelite mineral. By referring to the data sheets, it will be seen that comparative low tailings can be produced by tabling. Further tests are now being made to determine and confirm recovery and grade of the concentrate to be expected from the milling and treatment of this ore.

Signed K. M. Fletcher

Sweeney Tungsten Co. Ltd.
1506 West Commonwealth
Fullerton, California

X. Sampling and Assaying

The first sampling was done by Maj. Allured and K. M. Fletcher, 2503 Palm Place, Huntington Park, California, and consisted of a 400 lb. Grab Sample along the vein which assayed from .28% to .42% WO_3. This sample was taken to Oakland, California, and run through a dry recovery mill, but results were unsatisfactory. The recovery was excellent to a 4:1 concentrate ratio, but dropped too fast as the ratio was increased. Assay certificates are unavailabe on this test, but can be verified by Mr. Fletcher.

There is comparatively no high grade ore in this deposit. A picked sample ran 1.65% WO_3.

The samples mentioned in the engineer's report (Mr. Fletcher) were taken by Mr. L. C. Penhoel (engineer). The samples taken from the Forrest Shaft were from a trench made across the bottom of the shaft. The "stock pile" sample was taken by Mr. Penhoel. For description of other assays, see four beneficiation tests made by Mr. Penhoel. The assaying on the above were made by Eisenhauer Laboratories, 316 South San Pedro Street, Los Angeles, California.

Assays on the 5-ton test run made by Mr. A. Detloff's Pilot Mill in Randsburg, California, were made by Smith-Emery Company, 920 Santee Street, Los Angeles, California.

The Randsburg test gave some valuable information as to grade of concentrate to be expected (72%), and the calculated heads on a larger amount of ore, but the recovery was disappointing because of the flow sheet used in this plant. There is no provision made for treatment of slimes or midds. The entire flow from the mill is run in tandom over two tables, with no elimination of either slimes or tails from the first table, with the rough concentrate from the second table being returned to the mill for regrind. The scheelite in this concentrate is already -80 mesh.

I am sure with the flow sheet proposed in my mill that I can get between 88% and 90% recovery on this type of ore.

It will be noted that in the beneficiation tests made by Mr. Penhoel, there was no consideration given to the treatment of midds, and only once for the slimes, in arriving at the percentage of recovery.

Instead of my proposed classification into four table feeds, there were three tests on unclassified feeds and one test on a classification of two products.

Earl G. Sweeney

Mr. Earl G. Sweeney
1508 West Commonwealth
Fullerton, California

ART DETLOFF MILL
Randsburg, California

Pilot Mill

TABLE CONCENTRATION — Test No. 8

Sample from: Mr. Earl G. Sweeney
Fullerton, California
Truck Load from: "Stock pile"
Weight of Ore: 9,960 lbs.

Grind: 20 mesh
Feed: Unclassified
Slime treatment: None
Midds Treatment: None

Product	% Weight	$\%WO_3$
Calculated Heads	100.00	.441
No. 1 Concentrate	.165	72.34
No. 2 Concentrate	.187	62.00
Middlings	1.02	14.76
Tails	98.13	.06

6

Product	% recovery or distribution - Based on Calc. Heads	
	% Weight	$\% WO_3$
Calculated Heads	100.00	100.00
Nos. 1 and 2 Concentrate	.352(67% WO_3)	53.52
Middlings	1.52	33.16
Tails	98.13	13.32

Remarks: This test shows 53.52% recovery in a high grade table concentrate (67% before magnetic separation). With the 14.76% midds retrated, and the slimes treated the ore will show a very satisfactory recovery.

Mr. Earl G. Sweeney
1508 West Commonwealth
Fullerton, California

LABORATORY REPORT
SMITH-EMERY COMPANY
920 Santee Street
Los Angeles 15

Date December 5, 1951

LABORATORY
No. 347144-47

Sample Pulp

Received 12/3/51

Submitted by Earl G. Sweeney
425 North Spadra
Fullerton, California

REPORT OF DETERMINATIONS

"Test #6 Separator Rejects"

Tungsten trioxide (WO_3) --- 62.00%

"Test #6 Midds."

Tungsten trioxide (WO_3) --- 14.76%
Gold, ounces per ton --- trace
Silver, ounces per ton --- 0.35 oz.
Value at $0.905 per ounce $ 0.32 per ton

"Test #6 Concentrate"

Tungsten trioxide (WO_3) -- 72.34%

"Test #6 Tails"

Tungsten trioxide (WO_3) --- 0.06%

Respectfully submitted,

SMITH-EMERY COMPANY
Chemists and Engineers

7-C

L. E. Raymond
Ed. Eisenhaurer, Jr
L. G. Penhoel

Mr. Earl G. Sweeney
1508 West Commonwealth
Fullerton, California

EISENHAUER LABORATORIES
320-322 South San Pedro Street
Los Angeles 13, California
Phone: VAndike 9328

Ore Testing - Consultants for Improvement of Plant Efficiency - Mill Design

TABLE TEST | Lot 118 | Test No. 1 Page No. 1

Sample from: Mr. Earl G. Sweeney
Fullerton, California
Date Received: 9/4/51 Date Tested: 9/11/51
Character of Ore: Tungsten (scheelite) siliceous gangue.
Sample Marked: Rainbow random sample.
Nature of Test: Table, gravity concentration. Unclassified feed.
Weight of Ore Tested: 13,154 grams.
Object of Test: Determine economic recovery of scheelite.

Grind: Stage crushing and screening. Table rails.

Mesh.		Wt. %
Plus -	20/30	48.2
Minus	30/60	23.5
Minus	80/120	11.0
Minus	120	17.3
Minus	100	100.0

ASSAYS

Product	% Weight	% WO_3
Assayed Heads	~~100.00~~	.28
Calculated Heads	100.00	.282
Concentrate	1.52	11.32
Middlings	0.70	.36
General tails	97.78	.11
Slime tails		.15
Sand tails		.02

Product	% Recovery or Distribution - Based on Calculated Heads	
	% Weight	% WO_3
Calculated Heads	100.00	100.00
Concentrate	1.52	61.01
Middling	0.70	1.00
General tails	07.78	37.90

Remarks: The minus 20 plus 30 mesh particles contain included scheelite mineral.

Remarks: Preliminary test.

Signed: L. C. PENHEOL.

L. E. Raymond
Ed. Eisenhauer, Jr.
L. C. Penhoel

Earl G. Sweeney
1508 West Commonwealth
Fullerton, California

EISENHAUER LABORATORIES
320-322 South San Pedro Street
Los Angeles 13, California
Phone: VAndike 9328

Ore Testing - Consultants for Improvement of Plant Efficiency - Mill Design

TABLE TEST Lot No. 335

Test No. 3
Page No. 1

Sample from: Mr. Earl G. Sweeney
Fullerton, California
Date Received: 9/4/51 Date Tested: 10/10 on.
Character of Ore. This sample contained a lime gangue with garnet and is identified as, "carton sample". This test was tabling the -120 size on a slime deck.
Wt. of Ore Tested: 3655 grams
Object of Test. Determine if a screen sized feed improved table results.

Grind: Stage crushed and screened through 30 mesh and sized

Mesh	Wt.%
By dry screening to:	
Minus 30+120	85.30
Minus 120	34.70

ASSAYS

Product	% Weight	% WO_3
Assayed Heads		.14
Calculated Heads	100.00	.174
Concentrate	.17	61.11
Middling	None	
Tailing	99.83	.07

Remarks: Ratio of concentration 477 to 1.
The above conc'ts were after removing 33.5% by weight of magnetite and magnetic iron by magnet.

% Recovery or Distribution - Based on Calculated Heads

Product	% Weight	%WO_3
Calculated Heads	100.00	100.00
Concentrate	.17	59.80
Tails	99.83	40.20

Signed: L. C. PENHOEL

8-C

L. E. Raymond
Ed. Eisenhauer, Jr.
L. C. Penhoel

Mr. Earl G. Sweeney
1508 West Commonwealth
Fullerton, California

EISENHAURER LABORATORIES
320-322 South San Pedro Street
Los Angeles 13, California
Phone: VAndike 9328

Ore Testing - Consultants for Improvement of Plant Efficiency - Mill Design

TABLE TEST | Lot No. 115 | Test No. 2 Page No. 1

Sample from: Mr. Earl G. Sweeney
Fullerton, California
Date Received: 9/21/51 Date Tested: 9/22.24.25/51
Character of Ore: See Test 1.
Sample Marked. Sample of coarse ore from stock pile.
Nature of Test: Gravity concentration, minus 30 mesh unclassified table feed.
Wt. of Ore Tested: 11,703 grams
Object of Test: Determine if finer grind indicates better recovery.

Grind: Stage crushing and screening through 30 mesh.

ASSAYS

Product	% Weight	% WO_3
Assayed Heads		.30
Calculated Heads	100.00	.439
Concentrate	3.60	9.20
Middling	1.58	.23
Tailing	94.54	.11
Special Tailing		.09

Product	% Recovery or Distribution -- Based on Calculated Heads	
	% Weight	% WO_3
Calculated Heads	100.00	100.00
Concentrate	3.60	75.37
Middling	1.58	.93
Tailing	94.84	23.70
Ratio of concentration, 27.7 to 1.		
Special Tailings		19.40

Remarks: Concentrate contains gangue minerals, quartz and magnetite.

Signed: L. C. Penhoel

L. E. Raymond
Ed. Eisenhauer, Jr.
L. C. Penhoel

Mr. Earl G. Sweeney
1508 West Commonwealth
Fullerton, California

EISENHAUER LABORATORIES
320-322 South San Pedro Street
Los Angeles 13, California
Phone: VAndike 9328

Ore Testing - Consultants for Improvement of Plant Efficiency - Mill Design

TABLE TEST — Lot 115 — Test No. 4, Page No. 1

Sample from: Mr. Earl G. Sweeney
Fullerton, California
Date Received: 9/4/51 Date Tested: 10/10 on.
Character of Ore: See Test 3.
Sample Marked: "Carton"
Nature of Test: Tabling - 30/120 screen sizes.
Weight of Ore Tested: 7529 grams

Mesh
See Test 3.

ASSAYS

Product	% Weight	% WO_3
Assayed		.25
Calculated Heads	100.00	.211
Concentrate	1.90	7.36
Middlings	2.30	.19
Tailings	95.80	.07
Slime Tailings		.10

Remarks: Both concentrate and middlings contained lots of Garnet. Ratio of concentration. 52.6 to 1.

% Recovery or Distribution - Based on Calculated Heads

Product	% Weight	% WO_3
Calculated Heads	100.00	100.00
Concentrate	1.90	66.60
Middlings	2.30	1.90
Tailings	95.80	31.70

Signed: L. C. PENHOEL

Sweeney Tungsten Co., Ltd.
1508 West Commonwealth
Fullerton, California

3. (a) Continued (Cost):

Sinking and timbering Forrest Shaft - 75 ft. @ $45.00 per ft.		$ 3,375.00
Drifting Forrest Shaft	100 ft. @ $25.00 per ft.	2,500.00
Drifting "Ore Dump"	50 ft. @ $20.00 per ft.	1,000.00
Sinking "Red Butte"	100 ft. @ $45.00 per ft.	4,500.00
Drifting "Red Butte"	50 ft. @ $25.00 per ft.	1,250.00
Cross Cuts "Red Butte"	50 ft. @ $20.00 per ft.	1,000.00
Dozer work - 3 mos. @ $1,350.00 per mo.		4,050.00
3 miners @ $14.00 per day included in "footage" costs.		
Water Development		900.00
Camp Construction, Equipment installation)		
Hauling, Labor at "Red Butte" open cut)		
Road work, Repair wash)		3,080.00
Labor, 2 men, 5 mos @ $14.00 per day)		
Supervision, 5 mos. @ $650.00 per mo.		3,250.00
Supplies - Compressor		650.00
Supplies - Trucks (Gas & Oil) $100.00 month average		500.00
Supplies - 1500 lbs. dynamite, 3000 caps & 9,000 fuse for Road and "Red Butte" work		450.00
Repairs - average $150.00 per month		750.00
Assays - 45 @ $4.00 each		180.00
Total		$ ~~24,435.00~~ $27,435.00

Sweeney Tungsten Co., Ltd.
1508 West Commonwealth
Fullerton, California

3 (a) PROPOSED WORK AND COST:

I propose to sink 75 feet on the Forrest Shaft and drift 50 feet North and drift 50 feet South.

I propose to drift North at the "Ore Dump" 50 feet.

At the "Red Butte" I propose to strip the overburden North from the 65x30 outcrop for a distance of 300 feet, then open cut South into the mountain.

There is a soft fill running North and South and which forms the West wall of the ledge, where the tunnels and open cuts are located. I propose to strip this as deep as possible, then cross-cut the Ledge in two places for a distance of 15 to 30 feet each.

I propose to sink 100 feet at the "Red Butte" and drift 50 feet South.

I will build an access road to the "Red Butte" for a distance of about 4,000 feet, and repair the main road for a distance of 2 miles to enable me to haul in my heavy machinery and supplies.

I will dismantle and move the two cabins I bought last week now located 50 miles from the mine.

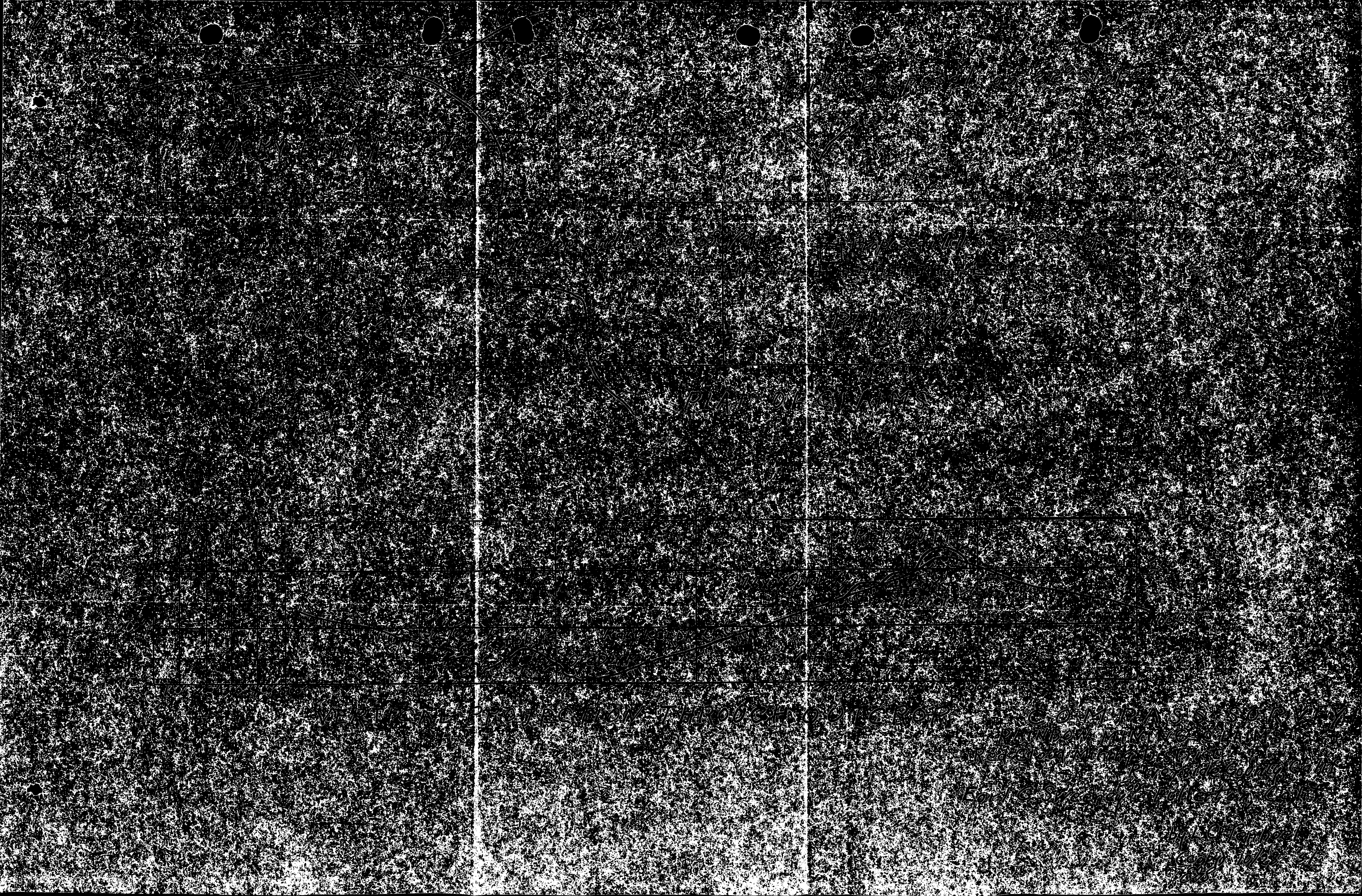
I will have to haul in the rest of my equipment and supplies.

Sweeney Tungsten Co. Ltd.
1508 West Commonwealth
Fullerton, California

3. (b) TIME:

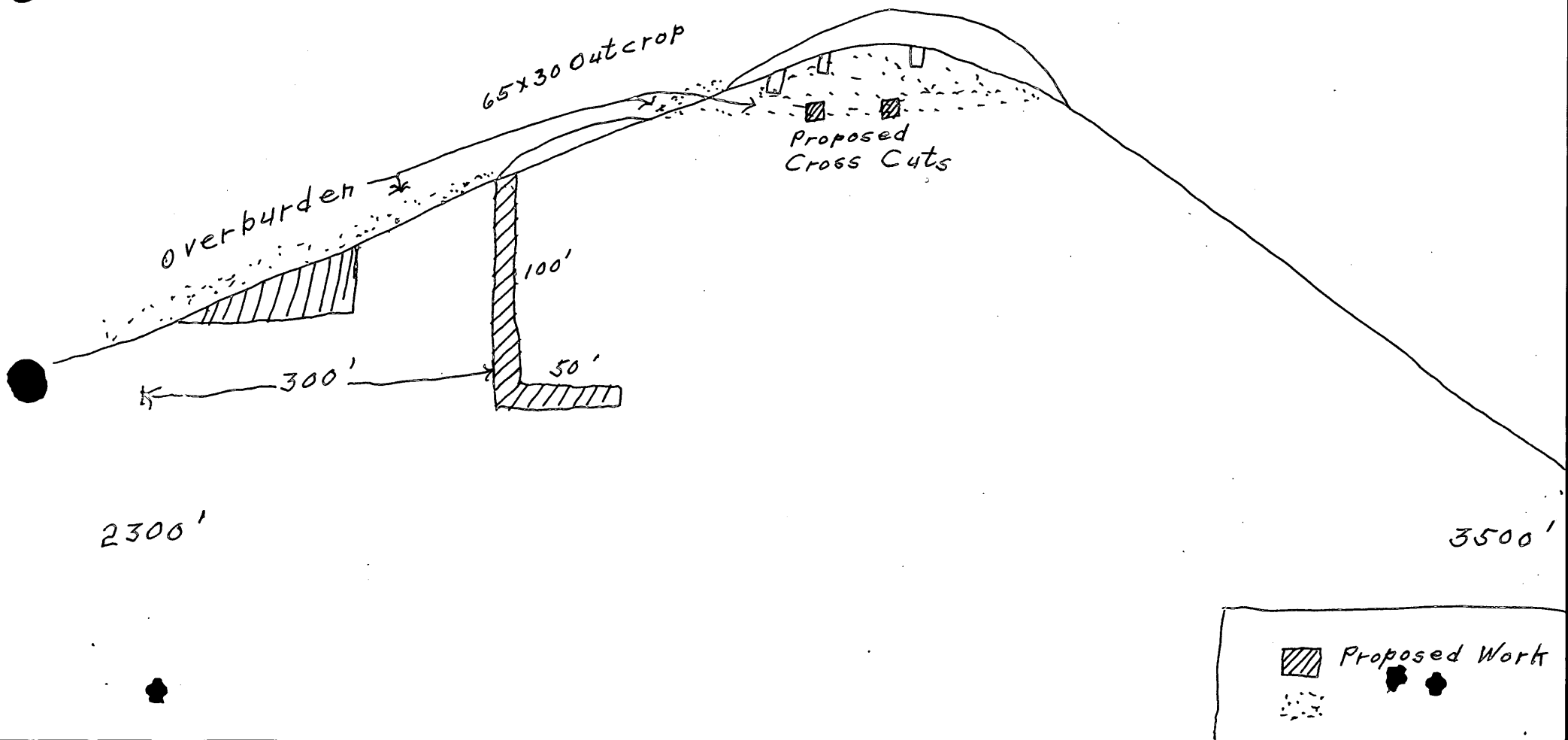
I have seven men working at the present time, and am prepared to continue the work until about February 20th.

If this loan is approved by that time, I expect to have the project completed in five months. If I have to close down for a time it will take several weeks longer to get another crew, dozer, etc., and start up again.


PLAN OF CLAIMS
VERTICAL PROJECTION THROUGH OUTCROP
COMPASS SURVEY
RAINBOW MINING CLAIMS
Red Cloud Mining District
Riverside County Calif.
For
Earl C. Sweeney Fullerton Calif.
by L.C. Tenhoel
(copy) 10/28-'51

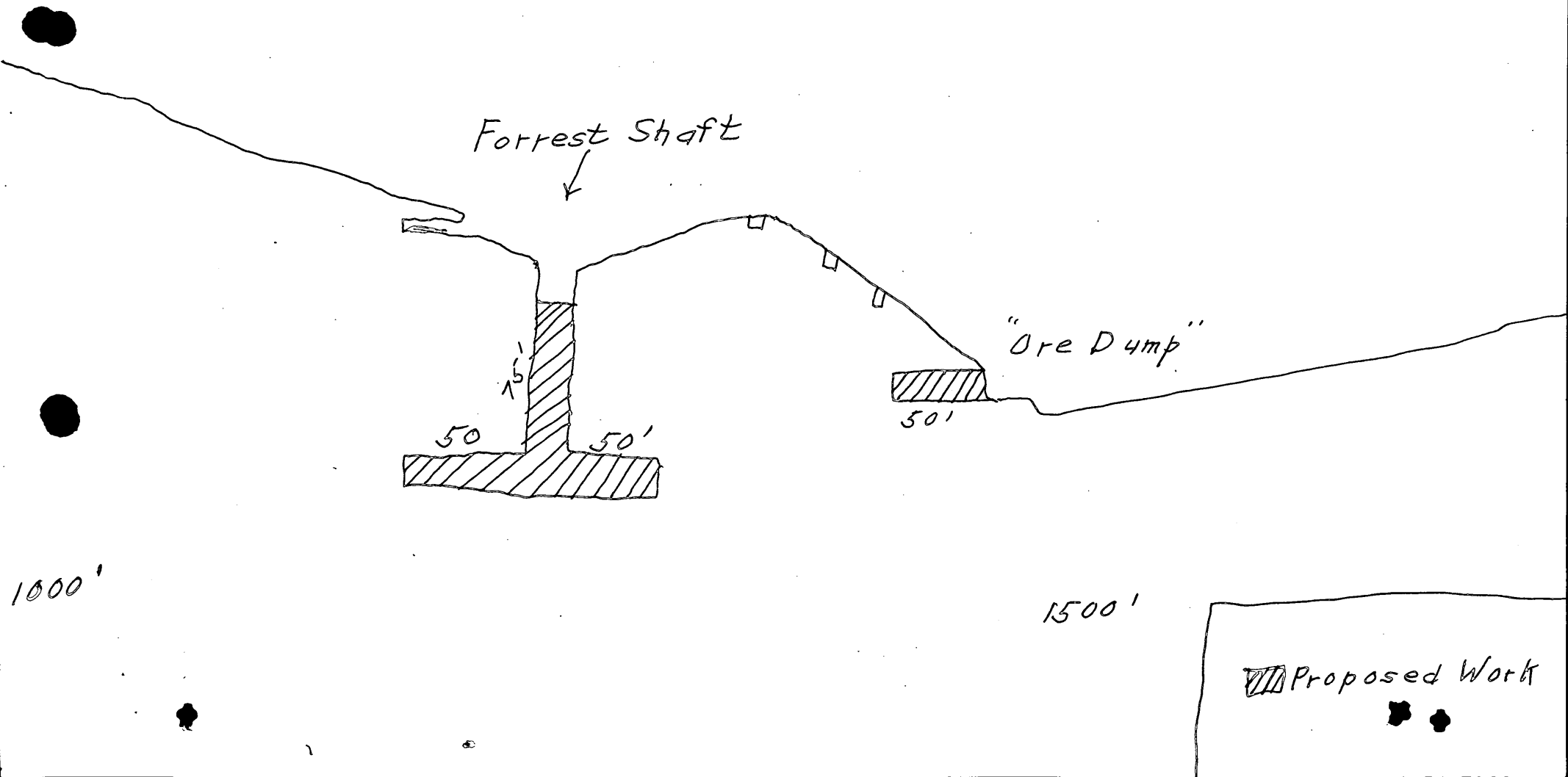
4. See Compass Survey Map.
Proposed Work

Red Butte



4. See Compass Survey Map

Proposed Work



Sweeney Tungsten Co. Ltd.
1508 West Commonwealth
Fullerton, California

5. FACILITIES:

There is one cabin on the property I have just finished repairing.

Sweeney Tungsten Co., Ltd.
1508 West Commonwealth
Fullerton, California

6. I have purchased two cabins which I propose to move and install at a cost of (Cost included in labor estimate) $650.00

Head frame, shaft timbering, ties, rails, etc., for the Forrest Shaft and Water Well is included in the cost per foot.

Sweeney Tungsten Co. Ltd.
1508 West Commonwealth
Fullerton, California

7. EQUIPMENT:

(a) Rented:
1 Bulldozer — $700.00 per mo.

(b) Purchase:
None

(c) Furnished by me

	Rental	Depreciation		Total
1 - 2 ton '48 Chevrolet Truck (winch)	$ 145.00 mo.	----		725.00
1 - ½ ton Ford Pick-up	90.00 mo.	----		400.00
1 - 1½ ton Chevrolet Flat Rack	35.00 mo.	----		175.00
1 Compressor mounted on above truck	165.00 mo.	----		825.00
2 Jack hammers and hose	50.00 mo.	----		250.00
1000 Bits		100%	$340.00	
12,000 ft. Lumber		90%	1,080.00	
125 Pieces Drill steel	25.00 mo.	----		125.00
1 Hoist	125.00 mo.	----		625.00
2000 ft. Air and water pipe		50%	350.00	
500 lbs. Hang rods - steel - bolts		75%	171.25	
1250 Gal. Diesel Oil @ .13¢ gal.		100%	162.50	
60 Gal. Lubricating Oil @ .79¢ gal.		100%	67.40	
1 Wislon yellow jacket Electric welder	50.00 mo.			250.00
1 Gas welding and cutting outfit	10.00 mo.			50.00
Welding supplies		100%	215.00	
1 Water pump and engine	20.00 mo.			100.00
500 lbs. Dynamite - 3,000 ft. fuse - 1,000 caps		100%	172.00	
Ore cans and buckets	5.00 mo.			25.00
1 Water tank		50%	200.00	
Rail		40%	220.00	
Tools, picks, shovels, mechanics, etc.	25.00 mo.			125.00
			$ 2,978.15	$ 3,675.00
				2,978.15
				$ 6,653.15

Sweeney Tungsten Co. Ltd.
1508 W. Commonwealth
Fullerton, California

8 Schedule of Labor:

1	Dozer Operator	$ 500.00 per month
3	Miners	14.00 per day
3	Men Combination - Construction, miners - Mechanics	14.00 per day
1	Supervision	650.00 per month
8		

Sweeney Tungsten Co. Ltd.
1508 West Commonwealth
Fullerton, California

9 COST - See 3(a)

10. (a) INVESTMENT

$6,858.75

(b) Sufficient share of cost.

Yes.

Sweeney Tungsten Co. Ltd.
1508 West Commonwealth
Fullerton, California

11. Circumstances:

We believe we have enough ore in sight to justify an immediate Mining and Milling Operation, but were told the Ore Reserves were insufficient to justify the size loan requested from the Defense Minerals Administration.

As to grade of Ore, I was very conservative in my estimate of "over .25%". I was making a liberal allowance for lean spots and wall rock which might dilute the grade on large tonnage basis.

I believe I could narrow the width of the ore mined and bring the values up to .40% or .50% but with the favorable mining conditions which exist on this property, I think .25% could be mined at a substantial profit. The exact percent of marginal ore would of course have to be determined.

This is not the usual "spotted" "metaprorphic deposit. It carries very uniform values, and is a true fissure vein, with no garnet, epidote, tactic, or "moly".

We spent $5,500.00 on this property between July 1, 1951, and December 1, 1951. We have spent another $4,800.00 since December 1st, and I am now spending at the rate of about $5,000.00 per month, but will run out of funds shortly.

We have about $40,000.00 worth of equipment for this project.

Form MF-524 (Rev.)
(April 1952)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.3.
Approval Expires 4-30-53.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 3 1952

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of August, 1952 Docket No. DMEA 2353 Contract No. Idm.E336
Operator's Name Sweeney Tungsten Co., Ltd. Minerals Tungsten
Address P. O. Box 185, Indio, California
Contract Amount, $ 29,800.00 Government Participation: 75 % Amount, $ 22,250.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling						
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor	$650.00	$1,158.00	$1,808.00			
Supervision	310.00	680.00	990.00			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives		130.67	130.67			
Pipe						
Track						
Inventory		68.05	68.05			
Gasoline		171.38	171.38			
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation	80.00	160.00	240.00			
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment		98.70	98.70			
Sampling and Analysis	279.00		279.00			
Payroll Taxes	19.74	56.20	75.94			
Liability Insurance	30.63	51.68	82.31			
(8) Contingencies (specify):						
TOTALS	$1,369.37	$2,574.68	$3,944.05			

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

Date Sept. 12 *Payee Sweeney Tungsten Co., Ltd.

Per [signature] Title General Partner

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

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

(Instructions on reverse)

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

$ 1,027.03

Signature A. J. Renner
Authorized Certifying Officer
(Authorized Certifying Officer)

Date OCT 30 1952 Vou. No. SF-DMEA-24

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

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

Signature [illegible] Title [illegible] Date [illegible]

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature [illegible] Title Executive Officer [illegible] Date [illegible]

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 5 1952

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of August, 1952 Docket No. DMEA _____ Contract No. Idm. E336
Operator's Name Sweeney Tungsten Co., Ltd. Minerals Tungsten
Address Box 185 - Indio, Calif.

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching		$1,369.37	7	$3,944.05	30	$131.47	35	$137.14
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		$1,369.37	7	$3,944.05				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		$1,369.37	7	$3.944.05				

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

Date Sept.12,1952 Operator Sweeney Tungsten Co.,Ltd

Per [signature] Title General Partner

REMARKS: Because of heavy rains we had to clean out the trenches and repair parts of the road,or the unit cost would have been about $120,80. To this should be added $2.66/unit for supplies and repairs paid for with Company funds, as contract allowance for these items was not enough to cover costs. Trenches average 15 x 5½.

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

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205676

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

RECEIVED
OCT 6 1952

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of July, 195 2 Docket No. DMEA 2353 Contract No. Idm. E 336
Operator's Name Sweeney Tungsten Co., Ltd. Minerals Tungsten
Address Box 185-----Indio, Calif.
Contract Amount, $ 29,800.00 Government Participation: 75 % Amount, $ 22,250.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent / Short Form } Contracts:						
Drilling						
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor	894.00	264.00	1,158.00			
Supervision	500.00	180.00	680.00			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives	24.84	105.83	130.67			
~~XXX~~ Inventory		68.05	68.05			
~~XXXX~~ Gasoline	67.89	103.49	171.38			
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation	120.00	40.00	160.00			
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment	98.70	None	98.70			
Sampling and Analysis						
Payroll Taxes	37.55	18.65	56.20			
Liability Insurance	41.34	10.34	51.68			
(8) Contingencies (specify):						
TOTALS	1,784.32	790.36	2,574.68			

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

Date Aug. 1, '52 *Payee Sweeney Tungsten Co., Ltd.

Per Earl G. Sweeney Title Gen'l Partner
EARL G. SWEENEY

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

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

(Instructions on reverse)

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

$ 1338.24

Signature
(Authorized Certifying Officer)

Date 9/30/52 Vou. No. SF-DMEA-16

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

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

Signature [illegible] Title [illegible] Date [illegible]

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature [illegible] Title Executive Officer, [illegible] Field Team, Region III Date [illegible]

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 6 1952

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of July 1952 Docket No. DMEA 2353 Contract No. Idm E 336
Operator's Name Sweeney Tungsten Co., Ltd., Minerals Tungsten
Address Box 185--Indio, Calif.

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching		1784.32	19	2574.68	23	111.94	35	137.14
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		1784.32	19	2574.68				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased		None						
Initial Rehabilitation and Repairs		None						
New Buildings, Improvements, etc.		None						
TOTAL COSTS		None						

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

REMARKS: See Narrative Report

Date Aug 1 '52 Operator Sweeney Tungsten Co., Ltd.

Per Earl G. Sweeney Title Gen'l Partner
EARL G. SWEENEY

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

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205676

[illegible] - [illegible]

[illegible]

[illegible] of [illegible] in the [illegible] [illegible] Co., Inc. This report deals [illegible] the [illegible], [illegible] on the property.

[illegible] Hole #1, we have completed 27 trenches, including some [illegible] after the previously [illegible].

[illegible] of the ledge is 27 cor, and because of the [illegible] in [illegible], we [illegible] there is to [illegible] of [illegible] feet. The average depth is over five feet and the [illegible] is over fifteen feet. We feel it will be more depth [illegible] the ledge to [illegible], which will be done in the [illegible] of [illegible].

[illegible] the Forrest Shaft, we cut in four trenches, [illegible] values of [illegible] values in the fourth trench were too low to justify further trenching in that direction, [illegible] under overburden.

[illegible] the Lower Shaft area, the values are in both the 'fault fissure' [illegible], and in the contact rock to the east. The [illegible] 'fault fissure' is least certain but there with [illegible] in [illegible]. [illegible] from this part are [illegible]. The values in this portion of the ledge are almost [illegible] in the contact rock to the east of the 'fissure'.

[illegible] we have cut the 'fault fissure' in four places, [illegible] to a depth of about fifteen feet. [illegible] at the depth and [illegible] of value, [illegible] to the east, [illegible] the ledge. [illegible] values to be east of the [illegible], as the [illegible] doesn't allow for drifting, [illegible] it isn't [illegible] because of overburden and the [illegible].

[illegible] the [illegible] to be [illegible] of [illegible] the [illegible] to the red [illegible] of about [illegible] feet [illegible] because of the depth of the overburden.

[illegible] in the red [illegible]. I expect to start [illegible] at a cutoff at the southern extremity of the ledge, and [illegible] the red [illegible] until the overburden was too deep [illegible].

[illegible] an over-all distance of 2250 feet between the first [illegible] trench.

[illegible]

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

Budget Bureau No. 42-R1[redacted]
Approval expires 6-[redacted]-53.

UNITED STATES
[redacted]EPARTMENT OF THE INTERI[redacted]
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of June, 1952 Docket No. DMEA 2359 Contract No. Idm. B 336
Operator's Name Sweeney Tungsten Co., Ltd. Minerals Tungsten
Address Box 105, Inyo, California
Contract Amount, $29,800.00 Government Participation: 75 % Amount, $22,350.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling						
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor	264.00	None	264.00			
Supervision	160.00	None	160.00			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives	105.83	None	105.83			
Pipe						
Track						
Gasoline	103.49	None	103.49			
Inventory	60.05	None	60.05			
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation	40.00	None	40.00			
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes	18.65	None	18.65			
Liability Insurance	10.34	None	10.34			
(8) Contingencies (specify):						
TOTALS	790.36		790.36			

I certify that the above bill is correct and just and that payment therefor has not been received.
Date July 1, 1952 *Payee Sweeney Tungsten Co., Ltd.
Per Earl C. Sweeney Title General Partner

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:
$ 592.77

Signature Lloyd L. Norvell
(Authorized Certifying Officer)
Date AUG 14 1952 Vou. No. SF-DMEA-7

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

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

(Instructions on reverse)

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idn-E336 in accordance with the terms of the contract.

Signature A. G. Johnson Title Chief, Mining Div., Region III Date July 8, 1952.

A. G. Johnson

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature H. C. Miller Title Executive Officer DMEA Field Team Region III Date Aug. 13, 1952

H. C. Miller

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205675

strike of the vein as shown on the attached sketch and near the locations of Rattlesnake Hill and Red Butte further to the south.

Recommendations have been made to Mr. Sweeney to cut at least 24 trenches at approximately 50 feet intervals to expose the vein which is the intent of the first stage of the contract.

The first stage of the work is nearing completion and unless increased scheelite values are found the contract should be terminated.

The second stage of the contract is not justified to date.

STATEMENT OF WORK COMPLETED

Eight trenches were completed at the time of the inspection. Three of these were deeper and longer than the 3' x 3' x 15' dimension outlined by the "Statement of Work" of the contract. The rate of work on trenching is slightly slower than the contract time.

Exploration work which the operator completed prior to signing the Government contract, consisted of bulldozer trenches along the strike of the vein but not across its full width.

PROGRESS * General

Buildings and fixtures: Three shacks are situated at the camp and are sufficient for boarding and lodging a crew of five workmen. A water pump at a spring located a few hundred yards from the camp supplied the water requirements for the crew.

Operating equipment:

1. To be rented - None
2. To be purchased - None
3. Owned and used by the operator on the contract:
   - 1 ½ Ton Pickup Truck
   - 1 Portable compressor - truck mounted
   - 1 Jackhammer with accessories
   - 1 Water Pump with small gas engine and pipe line to camp
   - Electric and gas welding equipment

Form MF-104A
(April 1952)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of June 1952 Docket No. DMEA 2353 Contract No. Idn B336
Operator's Name Sweeney Tungsten Co., Ltd. Minerals Tungsten
Address Box 185, Indio, California

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching	4	790.36	4	790.36	4	197.59	35	137.14
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		790.36	4	790.36				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased		None						
Initial Rehabilitation and Repairs		None						
New Buildings, Improvements, etc.		None						
TOTAL COSTS		None						

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

Date July 1, 1952 Operator Earl O. Sweeney
Per E. O. Sweeney Title General Manager

REMARKS: Unit cost is up because of initial supplies purchased this month.
We had to sink deeper than three feet on some trenches to reach the ore but expect to keep below the allowed cost on the completed project.

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

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205676

/Yes/ Audited

/No/ Certified

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

Analysis as of 12/13/1954
Incl. Voucher for

/Yes/ Actual Cost

/ / Agreed Unit Costs

Name Sweeney Tungsten

State California

Commodity Tungsten

Docket No. DMEA-2353

Idm-E No. 336

OPERATION	AUTHORIZED Units	AUTHORIZED Cost	COMPLETED Units	COMPLETED Cost	NET COST
Drifting & Crosscutting	* 600'	15,000.00			
Raising	* 200'	9,000.00			
Shafts					
Winzes					
Drilling (Specify)					
Surface Excavation		3,910.00		3,665.05	
Underground Excavation					
Roads and Trails					
Operating Equipment Purchased					
Surface Rehabilitation & Repairs					
Underground Rehabilitation					
New Building, Improvements, etc.					
Other (Specify)		1,890.00		279.00	
Totals		29,800.00		3,944.05	

* Estimated
Mineralization to low. Terminated by mutual consent.

Prepared by TLC

71626

400

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 2 1953

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 26, 1953

WSM

FINAL
F.T. REP.

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Final Report

Attached are four copies of Final Report on -

Docket DMEA-2353

Contract Idm-E336

Commodity Tungsten

Operator - Sweeney Tungsten Company

Property - Rainbow Mining Claims, Riverside County, Calif.

By Benjamin H. Sheahan, Mining Engr.

Dated February 23, 1953

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

Attachment

Copy to: E. H. Bailey, USGS (With one copy of report)
Geo. Mavor

Reviewed by
DMEA OPERATING COMMITTEE
3-6-53
(date)

cae 3/2/53

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 2 1953

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

Final Report

DMEA-2353, Sweeney Tungsten Co., Ltd.,

Riverside County, Calif.

Contract No. Idm-E336

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

February 23, 1953

Reviewed by
DMEA OPERATING COMMITTEE
3-6-53
(date)

FINAL REPORT

Docket No.: DMEA-2353 (tungsten) February 12, 1953

Name and address of operator: Sweeney Tungsten Co., Ltd., a partnership composed of Earl G. Sweeney, Elmer Tubbs, Floyd A. Tubbs, H. Everett Jones, and J. A. Fleming.
1508 W. Commonwealth,
Fullerton, California

Name and location of property: Sweeney Tungsten Co., Ltd., Rainbow Tungsten No. 1 and No. 2, unpatented claims, are located 8.5 miles S. 15° W. from Desert Center, Riverside County, Calif. The prospect is at an altitude of 2600 feet in the western part of the Chuckwalla Mountains. The property is reached by driving 9.1 miles west from Desert Center on U. S. Highway 60, turn left on poor gravel road leading southeasterly 8.9 miles to a camp near the claims.

Contract No. Idm-E336

SUMMARY AND CONCLUSIONS

The Rainbow tungsten property is a prospect. A hard, vitreous quartz vein with traces of scheelite mineralization forms a prominent outcrop. Exploration work conducted at the property consisted of surface trenching to expose the vein at 50-foot intervals along the strike length.

The operator has sunk two shallow exploration shafts, and did some surface trenching directly along the strike of the vein prior to signing the exploration contract. From thirty locations along the vein, where exploration work was conducted, samples were cut and analyzed (see fig. 1).

The mineralization was found to be too low grade to constitute ore of economic or commercial value. Therefore, the exploration con-

tract was terminated on October 1, 1952.

RECOMMENDATIONS

No additional exploration work, financed either privately or with Government assistance, is warranted.

DMEA should certify that the project was not successful.

Production is not economically feasible.

WORK COMPLETED

The operator completed the excavation of 28 surface trenches at intervals of approximately 50 feet along the vein. The trenches averaged 4 feet in width and depth and 14 feet in length. Including the Canyon Shaft and the Forest Shaft there are 30 exposures along the vein. From these 30 locations, the operator cut 60 samples according to the requirements of the contract (see fig. 1).

The first stage of the exploration work was started June 20, 1952 and was practically completed when the property was inspected by the engineer on August 21, 1952. Check samples were cut by the engineer on July 10 and Aug. 21, 1952. The analyses of the check samples indicated even less tungsten trioxide than those taken by the operator.

GEOLOGY

A quartz vein from 2 to 20 feet in width forms a prominent outcrop along portions of the Rainbow claims. The strike of the vein was from N. 20° W. to N. 30° W. and with steep easterly and westerly dips to vertical. Wall rocks consisted of gray gneiss. The vein material was composed of hard, vitreous buff colored silica and sili-

cates. The vein does not contain sufficient scheelite mineralization to constitute an ore as shown by sample and assay map (fig. 1). Traces of gold and silver were found in check samples of the vein taken by the engineer.

SAMPLE DATA AND ANALYSES

Sixty samples were cut by the operator. Each sample was quartered, and one half of the sample, which included opposite quarters, were combined and analyzed by Smith-Emery Company of Los Angeles, Calif., for tungsten trioxide. Sample pulps were mailed to the Mining Division, Region III of the U. S. Bureau of Mines, Reno, Nev.

The samples taken by the operator and also check sampling by the engineer with analyses shown on map (fig. 1) indicated that the vein was too low grade to constitute ore.

ORE RESERVES

There are no reserves of ore. The mineralization exposed is too low grade to have economic or commercial value.

EXPENDITURES

	Proj. Total	Government Participation	Operator
Contract	$29,800.00	$22,350.00	$7,450.00
MF-104's	- 3,944.05	2,958.04	986.01
	$25,855.95	$19,391.96	$6,463.99

Total approved	$29,800.00
Total cost of project (Claimed MF-104's).	3,944.05
Government's share of cost	2,958.04
Government's share unexpended	19,391.96
Value of production during operations and Government Royalty	None

EFFICIENCY OF OPERATIONS AND COMPETENCY OF OPERATOR

The surface trenches were excavated efficiently. Practically all trenches required drilling and blasting of the hard vein material. Sampling of the trenches by the operator was included with the contract. The operator did the sampling efficiently, however, when conclusive results were obtained from analyses of samples by the Smith Emery Co., the operator was disappointed.

Judging from check samples cut by the engineer and analyzed by the Hydrometallurgical and Ore Dressing Branch of the U. S. Bureau of Mines, it might be inferred that the operator lacked some qualifications to adequately sample his property.

EQUIPMENT PURCHASED FOR PROJECT

No operating equipment was purchased as shown by the operator's monthly reports and vouchers.

DOCKET

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 23 1953

Office of
Executive Officer
DMEA Field Team
Region III

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

January 19, 1953

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-2353 (Tungsten), Sweeney Tungsten Company, Ltd., Rainbow No. 1 and No. 2 Claims, Riverside County, California, Contract Idm-E336

Reference is made to your subject letter, dated January 7, requesting a copy of September MF-104 cost report on the above project.

Our records show that work under the contract was carried out from June 20 to August 18, 1952, and that the contract was terminated by the Government on October 1, 1952.

Final audit on the subject contractor's records was made on October 14, 1952, and final payment was made on MF-104 submitted for August 1952.

As the work under Stage I was completed on August 18 and approval by the Government to proceed on Stage II was not granted, there is no September cost report.

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

Copy to: E. H. Bailey, USGS

No reply necessary
WSM

FILE COPY
SURNAME:

Rutledge
Selfridge.

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

JAN 7 1953

BP

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 2353 - Tungsten
Sweeney Tungsten Company, Ltd.
Rainbow No. 1 and No. 2 Claims
Riverside County, California
Contract No. Idg-2336

Dear Mr. Miller:

Our records show that the MF-104 cost report for September on the referenced contract has not been received.

It will be appreciated if you will furnish us with this report at your earliest convenience in order that we may close out this contract.

J.C. 1-7-53

Sincerely yours,

Frank E. Johnson (HB)
Chairman, Operating Committee

CC: Docket
Admn. Read. File
Field Team, Reg. 3
Code 400
D. M. Lemmon, USGS
R. W. Geehan, USBM

FARutledge/ls 1/6/53

Approved:

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

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

400

FILE COPY
SURNAME:

Rutledge
Mention for
Selfridge

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

NOV 18 1952

Mr. H. O. Miller
Executive Officer, Region III
1012 Flood Building
870 Market Street
San Francisco 2, California

Re: Docket No. DMEA 2353 - Tungsten
Sweeney Tungsten Company, Ltd.
Rainbow No. 1 and No. 2 Claims
Riverside County, California
Exploration Contract No. Ida-2336

Dear Mr. Miller:

This is to inform you that this Administration concurs with the field team's conclusions that no significant discovery or development has resulted from the exploration work under Stage I of the subject contract, and hence, no certification will be required.

Our records show that the above referenced contract was terminated on October 1, 1952, by the Government after completion of Stage I. A total of $3,944.05 was spent under the contract of which the Government's share was $2,958.03, as reported by your office.

Sincerely yours,

C. O. Mittendorf (for) S.H. 11-18-52

Administrator

FARutledge:lm
11/14/52

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

FILE COPY 400
SURNAME:

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

Administrator, DMEA

November 14, 1952

Rutledge
Martin for
Selfridge

Iron and Ferro-Alloy Division, DMEA

Memorandum of Non-Discovery
Docket No. DMEA 2353 - Tungsten
Sweeney Tungsten Company, Ltd.
Rainbow No. 1 and No. 2 Claims
Riverside County, California
Exploration Contract No. Idm-2336

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 composed of the Rainbow No. 1 and No. 2 unpatented mining claims. It is located 8.5 miles S. 15° W. of Desert Center, California, in the Chuckwalla Quadrangle.

2. The mineral sought was scheelite, which occurs in a quartz vein that has been trenched over a strike length of more than 2000 feet. Traces of gold and silver are found in all samples taken by the field team, but the tungsten values are too low to be of commercial importance.

3. A five ton sample from the Canyon shaft and Forrest shaft locations produced 16 pounds of concentrate containing 68 percent WO_3. This indicated the sample contained 0.109 percent WO_3 that was recoverable.

4. The work completed under Stage I of this contract consisted of hand trenching and sampling. A total of 28 trenches were excavated.

5. The field team concluded that as a result of the exploration under Stage I, no ore was discovered and that there were no geologic indications that ore would be found by additional exploration.

6. The project was started June 19, 1952, and completed in September, 1952. The amount expended was $3,944.05 of which the Government's share was $2,958.03 or 75 percent of the total expenditure.

7. Since the results of Stage I were negative, the proposed exploration under Stage II was not approved by the field team and the contract was terminated as of October 1, 1952.

8. There were no major items of equipment purchased under this contract.

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

FARutledge'lm
11/14/52

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

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration
OCT 7 1952

Office of
Executive Officer
DMEA Field Team
Region III

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

Oct. 3, 1952

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Interim Inspection Report

On September 30, we sent your office four copies of Interim Report on Docket DMEA-2353, Contract Idm-E336 (Tungsten), Sweeney Tungsten Co., Ltd., by Benjamin H. Sheehan, dated Sept. 2, 1952.

Enclosed herewith are four copies each of additional assay returns, which should be attached to the report of September 2.

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

Attachments

Copy to: Finance Officer, Region III (With assay returns)

E. H. Bailey, USGS (With assay returns)

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 6 1952

Office of
Executive Officer
DMEA Field Team
Region III

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

October 1, 1952

Mr. Earl G. Sweeney
Sweeney Tungsten Company, Ltd.
1508 W. Commonwealth
Fullerton, California

Contract Idm-E336
Docket No. DMEA 2353
Rainbow No. 1 and No. 2 Claims
Riverside County, California

Dear Mr. Sweeney:

Our field examiners report that the mineralization exposed in the first stage of your contract is too low grade to have economic or commercial value. They also report that there was no geologic indication that ore of higher grade will be found by further exploration.

It is necessary to terminate the contract, and a formal notification to that effect, dated October 1, 1952, is attached.

Sincerely yours,

S. RICKER

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

Enclosure

Copy to: DMEA, Interior Bldg., Washington, D. C. (With copy of notice)
A. C. Johnson, Reno, Nevada (With copy of notice)
Finance Officer, Reg. III (With copy of notice)
E. H. Bailey, USGS

SRicker:am
Files
Chrono

To: Mr. Earl G. Sweeney
Sweeney Tungsten Company, Ltd.
1508 W. Commonwealth
Fullerton, California

Operator under Exploration Project Contract Idm-E336,
Docket No. DMEA 2353, dated June 6, 1952

The United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, under the terms of the above-mentioned contract, hereby terminates the contract on the following grounds:

In the opinion of the Government, operations up to the time of this notice have not indicated the probability of making any worthwhile discovery and in the opinion of the Government further operations are not justified.

Upon the receipt of this notice, as provided in said contract, you are required to dispose of any remaining materials, supplies, facilities, buildings, fixtures, equipment, or other items, in which the Government has an interest, for the joint account of yourself and the Government; and to render to the Government a full and final accounting of your operations under the contract and of your expenditures of money on account thereof.

Any work prosecuted or costs incurred by you after the receipt of this notice shall be for your sole account, 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.

Dated this first day of October, 1952.

UNITED STATES OF AMERICA

By [signature]
B. Kisker for H. C. Miller
Executive Officer, DMEA Field Team
Region III

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 6 1952

Office of
Executive Officer
DMEA Field Team
Region III

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

Date: Sept. 30, 1952

Memorandum

To: Operating Committee, DMEA, Interior Building, 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 2353

Contract Idm-E 336

Commodity Tungsten

Operator - Sweeney Tungsten Co., Ltd.

Property - Sweeney Tungsten Co., Ltd.
Riverside County, Calif.

By Benjamin E. Sheehan

Dated Sept. 2, 1952

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)

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 6 1952

GCS
10/7/52

INTERIM REPORT
(Second)

September 2, 1952

Docket No. DMEA-2353 (tungsten)

Name and address of operator: Mr. Earl G. Sweeney
Sweeney Tungsten Co., Ltd.
P. O. Box 185
Indio, Calif.

Name and location of property: Sweeney Tungsten Co., Ltd. Property located in un-surveyed section of Chuckawalla Mountains, Riverside County, Calif. Reached by driving 9.1 miles west of Desert Center on U. S. Highway 60, turn left on poor gravel road leading southeasterly 6.9 miles to a camp near unpatented Rainbow Tungsten mining claims.

Contract No. Idm-E336

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary:

The property was inspected on August 21 and 22, 1952. The engineer was accompanied by Mr. Earl G. Sweeney. Trenching operations and sampling were completed by the operator prior to the inspection date.

About 28 trenches have been completed to date. The analyses of 13 check samples taken by the engineer indicate that the vein contains insufficient tungsten to constitute ore.

The analyses of samples taken by the operator have not yet been received.

All trenches and the vein was lamped with ultra-violet light.

Conclusions:

Scheelite mineralization in the vein is too low grade to constitute ore. Further check sampling may be required.

Recommendations:

No further exploration work is recommended on the property.

STATEMENT OF WORK COMPLETED

The operator had completed 28 trenches as part of the first phase of the contract work (see sketch map).

Including the Forrest Shaft and the Canyon Shaft which are little more than prospect pits, there are 30 exposures along the vein. From these 30 locations, the operator cut 60 samples according to the terms of the contract.

COMMENTS ON PROGRESS MADE

A heavy rain storm during the early part of August washed out the road from the property to the highway in a number of places. The road was repaired but is still in poor condition.

The operator supervised the work on the trenching and sampling. The crew consisted of Mr. Sweeney, one miner, and from two to three laborers.

The examining engineer inspected all trenches on the property. Whether or not the operator cut representative samples of the vein is of course unknown, although Mr. Sweeney cut most of the samples personally.

Each sample was quartered. One half was to be taken to Smith Emery for analysis. Result of these samples together with sample pulps are to be sent to this office: Bureau of Mines, Mining Division, Region III, Reno, Nev. One set of samples which includes one quarter of each sample was stored in a metal box in Mr. Sweeney's cabin.

RESULTS OF ANY CHECK SAMPLING AND ASSAYING

Check samples were taken by the engineer (see sketch map with this report).

OTHER INFORMATION

The vein and every trench was lamped with ultra-violet light. Practically no commercial tungsten ore was observed.

Benjamin H. Sheahan

Benjamin H. Sheahan
Mining Engineer

DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

8/19/52

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

AUG 18 1952

Office of
Executive Officer
DMEA Field Team
Region III

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

Date: August 13, 1952

Memorandum

To: Operating Committee, DMEA, Interior Building, 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 2353

Contract Idm-E 336

Commodity Tungsten

Operator - Mr. Earl G. Sweeney
Sweeney Tungsten Co., Ltd.

Property - Sweeney Tungsten Co., Ltd.
Riverside County, California

By Benjamin H. Sheahan

Dated August 6, 1952

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)

August 6, 1952

INTERIM REPORT

Docket No. DMEA-2353 (tungsten)

Name and address of operator: Mr. Earl G. Sweeney
Sweeney Tungsten Co., Ltd.
P. O. Box 185
Indio, California

Name and location of property: Sweeney Tungsten Co., Ltd.
Property located in un-surveyed section of Chuckwalla Mountains, Riverside Co., Calif. Reached by driving 9.1 miles west of Desert Center on U.S.Highway 60; turn left on fair gravel road leading southeasterly 8.9 miles to a camp near unpatented Rainbow Tungsten mining claims.

Contract No. - Idm-E336

SUMMARY, RECOMMENDATIONS AND CONCLUSIONS

The property was inspected on July 10, 1952. Mr. Earl G. Sweeney accompanied the engineer over the claims. The vein was examined, lamped with ultra-violet light and samples were taken by the engineer at locations shown on the sketch map included with this interim report.

The first stage of the contract work consists of 35 trenches at intervals of approximately 50 feet along the vein. Deep overburden along two sections 700 feet and 300 feet in length along the strike of the vein tend to limit the use of shallow trenching at these two locations.

The tungsten trioxide content in the samples indicates that the vein contains insufficient scheelite to constitute ore.

Prior to signing the Government Contract Idm-E336 on June 19, 1952, Mr. Sweeney and partners did trenching directly along the

strike of the vein as shown on the attached sketch and near the locations of Rattlesnake Hill and Red Butte further to the south.

Recommendations have been made to Mr. Sweeney to cut at least 24 trenches at approximately 50 foot intervals to expose the vein which is the intent of the first stage of the contract.

The first stage of the work is nearing completion and unless increased scheelite values are found the contract should be terminated.

The second stage of the contract is not justified to date.

STATEMENT OF WORK COMPLETED

Eight trenches were completed at the time of the inspection. Three of these were deeper and longer than the 3' x 3' x 15' dimension outlined by the "Statement of Work" of the contract. The rate of work on trenching is slightly slower than the contract time.

Exploration work which the operator completed prior to signing the Government contract, consisted of bulldozer trenches along the strike of the vein but not across its full width.

PROGRESS * General

Buildings and fixtures: Three shacks are situated at the camp and are sufficient for boarding and lodging a crew of five workmen. A water pump at a spring located a few hundred yards from the camp supplied the water requirements for the crew.

Operating equipment:

1. To be rented - None
2. To be purchased - None
3. Owned and used by the operator on the contract:
   - 1 ½ Ton Pickup Truck
   - 1 Portable compressor - truck mounted
   - 1 Jackhammer with accessories
   - 1 Water Pump with small gas engine and pipe line to camp
   - Electric and gas welding equipment

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.

August 1, 1952

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 2353 (Tungsten), Sweeney Tungsten Co., Ltd.
Exploration Project Contract Idm-E336 - Inspection Reports

Attached are four copies of subject inspection report, dated July 23, 1952 by Benjamin H. Sheahan.

This inspection was finished prior to receipt of Memorandum No. 9, dated July 15, 1952, from Mr. G. C. Selfridge of the Washington DMEA Office. On future inspections and reports instructions given in that memorandum will be followed.

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

inspect report
Copy retained 400

Attachment

Copy to E. H. Bailey (with copy of report)

A. C. Johnson, Chief, Mining Div., Reg. III July 23, 1952

Benjamin H. Sheahan, Mining Engineer, Bureau of Mines, Reg. III

Preliminary Inspection Report: Sweeney Tungsten Co., Ltd., Riverside County, Calif. - Contract Idm-E536

Summary:

The property was inspected on July 10, 1952. Mr. Sweeney accompanied the engineer over the claims.

The contract work consists of two stages. The apparent intent of the first stage was to expose the vein with 35 trenches at 50-foot intervals and sample the outcrop as thoroughly as possible.

The operator and the examining geologist have apparently taken but few samples. The operator trenched along the strike of the vein prior to obtaining an approved Government contract but took few samples.

Whether or not the second stage of the contract is warranted will depend upon the results of the first stage of the work.

Analyses of samples taken by the inspecting engineer are not yet completed. Tungsten mineralization may not be sufficient to constitute commercial ore.

The vein is covered with overburden from 5 to 15 feet deep ~~along~~ two sections 700 feet and 500 feet in length. Along the remainder of the two claims, the vein can be exposed by the trenches proposed in the contract.

A four man crew including Mr. Sweeney and Mr. Tubbs are doing the exploration work.

Benjamin H. Sheahan

Benjamin H. Sheahan

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.

June 20, 1952

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 No. DMEA 2353X - Tungsten, Sweeney Tungsten Company, Ltd. Riverside County, California, Exploration Project Contract Idm-E 336

Reference is to your subject letter, dated June 6.

Enclosed are the Government's, Finance Office's, Docket and Division copies of Exploration Project Contract Idm-E 336, which were signed by Mr. Earl G. Sweeney, General Partner on June 19.

The contract as prepared is satisfactory to Mr. Sweeney, although some amendment to Stage I may be necessary following a visit to the property by our mining engineers. Since making application for an exploration loan, Mr. Sweeney has done considerable work on the property, which may have some influence on what can be done under Stage I. For example, due to the lay of the land, Mr. Sweeney has found that it is not possible to trench every fifty feet along the vein. Work under the contract, however, will start in a few days and if an amendment to the contract is necessary we can take care of it out here.

We shall expect the Finance Office's copy back from you shortly.

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

Attachments

Copy to: E. H. Bailey, USGS

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 24 1952

SJS 6-24-52

Docket
FILE COPY 400
SURNAME:

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

Chapman
Selfridge
Fridge

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

JUN 6 1952

Re: Docket No. DMEA 2353X - Tungsten
Sweeney Tungsten Company, Ltd.
Riverside County, California

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" (3 pages), a sketch map showing claims and a profile along vein, and an areal map of the region.

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.

Please note that the following major changes have been made in the application as originally presented.

1. The applicant asks for a loan of $27,435.00 for shaft sinking and drifting.

   The contract following the outline as recommended by the field team is divided into two stages. The first stage is to consist of surface trenching at a cost of $4,800.00. This is $800.00 above the cost estimated by the field team.

2. The second stage is dependent upon the results obtained in the first stage and will consist of about 800 feet of underground work, including shaft sinking and drifting. This is estimated to cost $25,000.00.

3. The total cost of the project will be $29,800.00 or $800.00 above the field team estimate and $2,365.00 above the loan applied for.

Sincerely yours,

cc (signed) FRANK E. JOHNSON

6/6/52 Chairman, Operating Committee (GHB)
Defense Minerals Exploration
Administration

Enclosures

Approved:

J. H. Hodges (GHB)
Member, Bureau of Mines

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

TLChapman'lm
6/4/52

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

P.S. It will be necessary to insert in the contract in the space provided under Article 3 the number of days from the date of the contract in which work shall commence.

ASSOCIATES
SYDNEY SANNER
THOMAS J. MADDEN
JOSEPH C. SMITH

JOHN AMOS FLEMING
ATTORNEY AT LAW
5658 WILSHIRE BOULEVARD
LOS ANGELES 36, CALIFORNIA
WEbster 8-6271

May 27, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 29 1952

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

Re: Docket No. DMEA 2353X-Tungsten
Rainbow No. 1 & No. 2 and
Lucky Penny Claims
Riverside County, California

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

Dear Mr. Selfridge:

At the request of Earl G. Sweeney, who is the sole general partner of Sweeney Tungsten Co., a limited co-partnership, I am enclosing a copy of the Certificate of the formation of this partnership, the original of which I know is recorded, and also on file with the Clerk of Riverside County, California.

In the last paragraph of your letter of May 22 to Mr. Sweeney you say it will be necessary for all the partners to sign the contract or for him to have a power of attorney from them. Under the provisions of Section 15501 et seq. of the Corporations Code of the State of California, which has the Universal Limited Partnership Act, an act which is in effect in 26 states, the general partners have the sole and exclusive power to manage the business and affairs of the partnership, including transfer, conveyance and hypothecation of all property, both real and personal. Accordingly, by law, Mr. Sweeney, being the sole general partner, is the only person authorized to do any act for the Sweeney Tungsten Co. In the event of litigation either against or by them he alone is the proper party to appear. The limited partners have no liability and have no authority. Mr. Sweeney has no objection, nor do the limited partners have any objection to signing the contract if you are not satisfied of his authority under the law quoted to you.

Yours very truly,

John Amos Fleming

JOHN AMOS FLEMING

JAF.MBG
Enc-Orig. Deed of Mining Claim
cc of Cert. of Formation

FILE COPY
SURNAME:

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

Chapman
Selfridge
TLC

MAY 22 1952

Mr. Earl G. Sweeney
Sweeney Tungsten Company
1508 West Commonwealth
Fullerton, California

Re: Docket No. DMEA 2353X - Tungsten
Rainbow No. 1 & No. 2 and Lucky
Penny Claims
Riverside County, California

Dear Mr. Sweeney:

After a review of your application for assistance in exploration of the aforementioned property by the Legal Department, we are advised that it will be necessary for you to make a transfer of the Rainbow No. 1, Rainbow No. 2 and Lucky Penny claims to the Sweeney Tungsten Company.

If you do not choose to transfer the claims to the Sweeney Tungsten Company, you could lease them to the Company for a minimum period of 10 years. In this case, you would be required to submit a consent to lien. We are enclosing 7 copies of the consent to lien form.

Upon receiving the transfer or lease and consent to lien, we will proceed with the processing of your application.

If and when you receive a contract, it will be necessary for all the partners to sign it or for you to have a power of attorney.

Sincerely yours,

cc 5/22

George C. Selfridge

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

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

Enclosures

TLChapman:lm
5/21/52

140

FILE COPY
SURNAME:

Barling

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

May 15, 1952

Memorandum

To: George R. Selfridge

From: Chief Counsel

Subject: Contract Docket No. DMFA-2353, Sweeney Tungsten Company, Ltd.

There is attached, in satisfactory legal form for execution, a contract covering the subject project, subject to the addition to the contract of recording data covering the unpatented Lucky Penny claims or annexing something in lieu thereof (see paragraph 3(c) of DMFA Circular 21); subject to the completion in the first paragraph of the contract form of the description of the entity of the Operator (see paragraph 3(b) of DMEA Circular 21); and subject to the attachment to the contract of the sketch map referred to in Exhibit "A".

J. L. Hofflund

J. L. Hofflund
Chief Counsel

Attachments

HCRubin/bjl

Copy to: Mails & Files
J. L. Hofflund
H. C. Rubin
Chron.

FILE COPY
SURNAME:

Selfridge

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

APR 30 1952

Mr. Earl G. Sweeney
Sweeney Tungsten Co., Ltd.
Indio, California

Re: Docket No. DMEA 2353 - Tungsten
Rainbow No. 1 and No. 2 Claims
Riverside County, California

Dear Mr. Sweeney:

A copy of your letter of April 14, 1952, to the Defense Materials Procurement Agency, has been forwarded to us.

We note from the information in your letter that your recent work has indicated an improvement in the tungsten content of the vein.

With regard to your exploration application, we have prepared a tentative contract for final approval. Also we wish to advise you that any exploration work done prior to the signing of the contract cannot be included as a cost under the contract.

Sincerely yours,

C. O. Mittendorf

P.N. 4-30-52

Acting Administrator
Defense Minerals Exploration
Administration

GCSelfridge:ls
4/29/52

cc: Admn. Reading File
Docket
Field Team, Region 3
G. C. Selfridge
D. M. Lemmon, USGS
R. W. Geehan, USBM

Sa

Indio, California
April 14th, 1952

Defence Minerals Procurement Agency,
Washington 25, D. C.

Fesso Alloys Branch Docket No. 2353 - Sweeney
~~Docket No. 2397~~

Dear Sirs:

I have some supplementary information I am sending you herewith regarding the Exploratory Loan I have applied for.

I have been working eight men since the first of January and have practically completed the Roads, Camp, and Water System.

I have done some work on the ledge since Mr. Irvin of the Geological Survey inspected it, which bears out my contention that the values will improve with depth, until the weathered zone is passed. (See sketch)

Values in the Forrest Shaft jumped from .17% at 11 feet to .30% at 21feet and the sample I have just taken at 30 feet is still better. I am down 35 feet on it and am not on either wall. I will cross cut for width at 50 feet.

The Canyon Shaft averages .41% across eight feet at a depth of 5 feet below the Canyon level, (35 feet face). Four feet .50% and four feet runs .32%. I have taken another sample at 10 feet that I believe will average better than .50%. The shaft is on one wall. Will cross cut for width.

I have made an open cut along the ledge at the Rattlesnake a distance of 100 feet, 14 feet wide, to a depth of 10 feet, but have not cross cut a sample yet. There is a three feet step on the East wall that I believe will run better than 1½%.

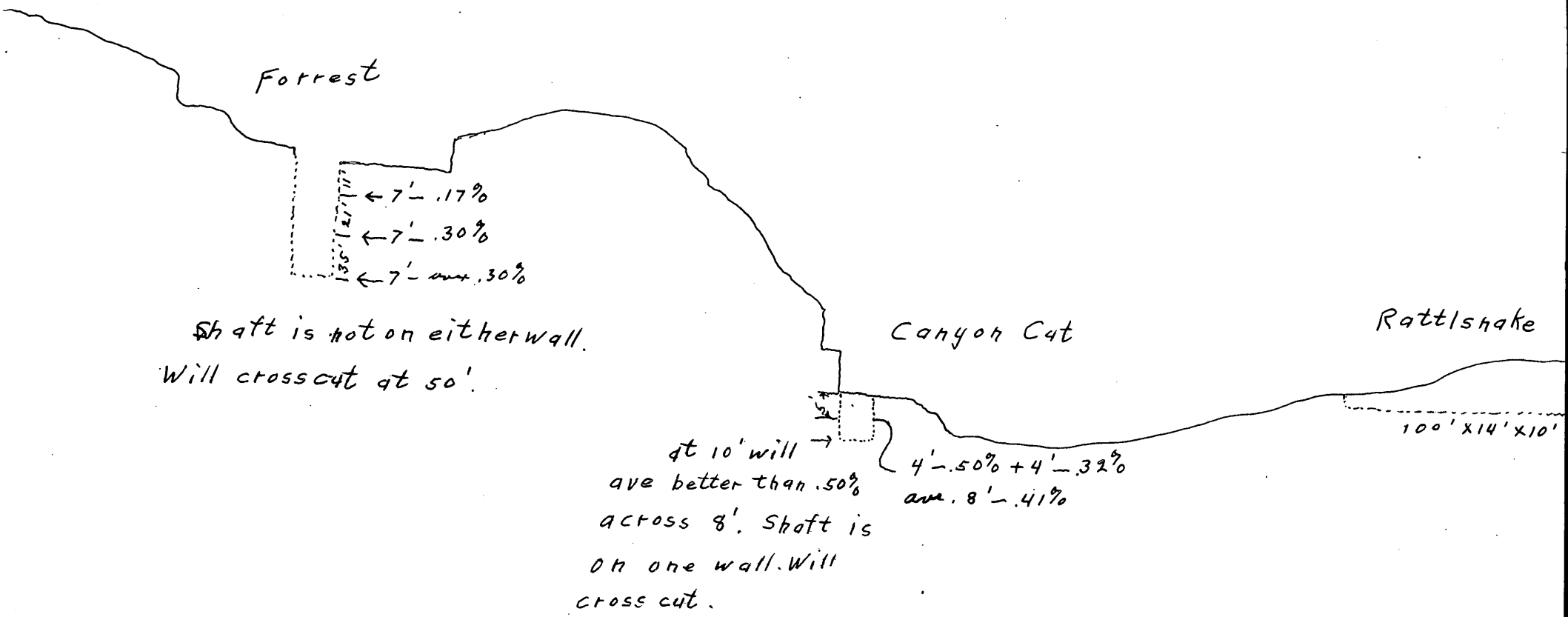
I have not done any new work on the "Red Butte" area.

Sincerely,

Earl G. Sweeney.

EGS:c
Enclosure

Rainbow Mine (North Section)



FILE COPY
SURNAME:

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

Mr. John L. Hofflund, Chief Counsel, DMEA

April 18, 1952

Chapman
Selfridge

Iron and Ferro-Alloy Division, DMEA

Contract for review and final preparation:
Docket No. DMEA 2353 - Tungsten
Sweeney Tungsten Company
Rainbow No. 1 and No. 2 claims
Chuckawalla Quadrangle
Riverside County, California

A rough draft of the contract is attached hereto, together with an aerial map and sketch of the proposed work.

The amount of the loan is $29,800.00, of which the Government's share is $22,350.00.

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

Attachments

TLChapman:ls
4/18/52

cc: Admn. Reading File
Docket
G. C. Selfridge

Sweeney Mangulin Co.
A limited partnership
Conducting a mining
business in the County
of Riverside, State of Calif.
Composed of

Earl C. Sweeney
1508 West Commonwealth
Fullerton, Calif
A limited and general
partner.

Elmer Dubbs
316 Eye Street.
Bakersfield, Calif
Lloyd G. Dubbs
1108 Tulare Street
Station A
Bakersfield, Calif.
H Everett Jones
1819 Coldwater Canyon Drive
Beverly Hills, Calif.
J. A. Fleming
16916 Parthenia Street
San Fernando, Calif.

Draft to Legal

Sweeney Tungsten Co., Ltd.
Exploration Project Contract
Rainbow No. 1 & No. 2 Claims
Docket No. DMEA 2353

Exhibit "A"

Description of the Work

This exploration will be divided into two stages; the first consisting of surface trenching and the second of underground work.

Time Schedule
Month

Stage I

0 - 2 This work will consist of 35 trenches at intervals of approximately 50 feet along the vein (see attached sketch map). These trenches will be about 15 feet in length, 3 feet in width and 3 feet in depth in the vein. Approximately 2 samples, each from 5 to 8 feet in length, will be taken from the bottom of each trench. The samples are to be taken from a channel about 1 foot wide and 3 to 4 inches deep. Each sample is to be cut and quartered to 4 - 10 pound samples, one of which is to be sent to the U. S. Geological Survey, one to the U. S. Bureau of Mines, one to the Operator, and one to a custom assayer mutually agreed upon.

Stage II

3 - 7 Stage II will be dependent upon the results obtained from the trenching and sampling of Stage I. This work will be undertaken only after the completion of Stage I to the satisfaction of and approval by the Government.

The work of Stage II will consist of about 1,000 feet

of underground work. The places and type of this work will be mutually agreed upon by the Operator and representatives of the Government.

Estimated Cost of the Project

Stage I

*Indicates allowable maximums

Independent Contracts

Not applicable

Labor and Supervision

1 - Supervisor @$500.00/Mo., 2 months	$1,000.00*	
1 - Machineman @$15.00/day, including overtime, 40 days	600.00	
1 - Mucker @$14.00/day, including overtime, 40 days	560.00	
1 - Sampler @$14.00/day, including overtime, 40 days	560.00	
1 - General utility man@$15.00/day, including overtime, 40 days	600.00	$3,320.00

Operating Materials and Supplies

Supplies (Fuel, oil, tools, powder, caps, fuse)	380.00

Operating Equipment

Owned by the Operator.	Replacement Value
1 - 1/2 ton pickup truck	1,800.00
1 - Portable compressor on truck	4,200.00
1 - Jackhammer and accessories	500.00
1 - Water pump and engine	200.00
Electric and gas welders	500.00
	7,200.00

Depreciation, 2 months, 1/60th per month	240.00

Rehabilitation and Repairs

Not applicable

New buildings, improvements and installations

Not applicable

Miscellaneous

Repairs	100.00	
Assaying, 70 samples @$4.00	280.00	
Accounting	50.00	
Compensation insurance, Social Security, Employees Liability Insurance, etc.	260.00	690.00
Contingencies		170.00
TOTAL COST OF STAGE I		$4,800.00

Stage II

This stage will consist of about 1,000 feet of underground work at an average cost of $25.00 per foot. 25,000.00

The location and exact type of this work can only be determined after the results are obtained from Stage I. The contract will be amended to show location, type of work, and individual costs.

TOTAL COST OF PROJECT $29,800.00

Government participation 75 per cent of the above, or $22,350.00

Indio, California
April 14th, 1952

Defence Minerals Procurement Agency,
Washington 25, D. C.

Fesso Alloys Branch Docket No. 2353
Docket No. 2397

Dear Sirs:

I have some supplementary information I am sending you herewith regarding the Exploratory Loan I have applied for.

I have been working eight men since the first of January and have practically completed the Roads, Camp, and Water System.

I have done some work on the ledge since Mr. Irvin of the Geological Survey inspected it, which bears out my contention that the values will improve with depth, until the weathered zone is passed. (See sketch)

Values in the Forrest Shaft jumped from .17% at 11 feet to .30% at 21feet and the sample I have just taken at 30 feet is still better. I am down 35 feet on it and am not on either wall. I will cross cut for width at 50 feet.

The Canyon Shaft averages .41% across eight feet at a depth of 5 feet below the Canyon level, (35 feet face). Four feet .50% and four feet runs .32%. I have taken another sample at 10 feet that I believe will average better than .50%. The shaft is on one wall. Will cross cut for width.

I have made an open cut along the ledge at the Rattlesnake a distance of 100 feet, 14 feet wide, to a depth of 10 feet, but have not cross cut a sample yet. There is a three feet step on the East wall that I believe will run better than 1½%.

I have not done any new work on the "Red Butte" area.

Sincerely,

Earl G. Sweeney.

EGS:c
Enclosure

DOCUMENT MAIL
APR 18 9 00 AM '52
RECEIVED

521358

IN REPLY REFER TO:

G-MD-DML

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

April 9, 1952

APR 10 1952

Memorandum

To: George C. Selfridge, DMEA

From: D. M. Lemmon, U.S.G.S.

Subject: Field Report DMEA 2353 - Tungsten
Rainbow Mining claims
Sweeney Tungsten Company
Riverside County, California

The Rainbow deposit was examined February 29 and March 1, 1952 by L. D. Clark and W. P. Irwin of the Geological Survey. Their report, dated March 24, 1952, recommends an exploration project costing $29,000, divided into a first phase consisting of surface trenching and sampling at a cost of $4,000, and a second phase of drifting.

The Field report does not show that the examining geologists took any samples for assay.

I concur with the recommendation that an exploration contract be negotiated for the work proposed by the Field Team.

D. M. Lemmon

Copy retained 400

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.

April 8, 1952

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-2353X (Tungsten) - Rainbow Mining Claims,
Riverside County, California

Supplementing our memorandum of March 26 on the above subject, attached is part of the docket file which inadvertently became separated from our file and was not returned to you with our memorandum.

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

Attachment

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 14 1952

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.

March 26, 1952

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-2353X (Tungsten) - Rainbow Mining Claims, Riverside County, California

Reference is made to subject "Review of Application for Exploration Assistance", dated February 7, 1952.

Attached are four copies of a report, "DMEA-2353, Sweeney Tungsten Company, Rainbow Prospect, Riverside County, California", by L. D. Clark and W. P. Irwin, Geologists, U. S. Geological Survey, dated March 24, 1952.

The examining geologists recommend that the deposit be explored in two phases, the second phase to depend on the outcome of the first. The first phase would cost about $4,000, and consist of surface trenching and sampling. The second phase would be necessary only if the results of the first phase are encouraging, but do not indicate sufficient ore to warrant building their mill. The second phase would cost about $25,000, and consists of tunneling underground.

The subject docket is being returned herewith.

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

Attachments

Copy to E. H. Bailey, USGS

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
MAR 31 1952

UNITED STATES
DEPARTMENT OF THE INTERIOR
OSCAR L. CHAPMAN, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

DMEA 2353, Sweeney Tungsten Company, Rainbow Prospect

RIVERSIDE COUNTY, CALIFORNIA

ON-SITE EXAM

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
MAR 31 1952

L. D. Clark, Geologist
W. P. Irwin, Geologist
U. S. Geological Survey

Reviewed by
DMEA OPERATING COMMITTEE

4-7-52
(GHB) (date)

March 24, 1952

SUMMARY

The Rainbow tungsten prospect opens a scheelite-bearing quartz vein that can be traced for more than 3000 feet. For a length of 2000 feet, and an average width of 10 feet, the vein is estimated to contain 0.25 percent WO3. Over a narrower width of 5 feet it is estimated to contain 0.3 to 0.4 percent WO3, for the same length. Measured reserves are negligible, but assuming that the deposit extends to an average depth of 100 feet, it may contain 200,000 tons of inferred ore with a grade of 0.25 percent WO3.

It is recommended that the deposit be explored by a program to consist of two phases, the first phase to consist of surface trenching and sampling at a cost of $4000 to determine the outline of ore shoots and general tenor of the ore. If the results of the first phase are encouraging but do not indicate sufficient reserves to warrant erection of a mill, the second phase should be inaugurated. The second phase consists of driving 800 to 1000 feet of underground workings at a cost of approximately $25,000. If the exploration is successful, a Government core-drilling program may be warranted to determine the full extent of the deposit for the purpose of increasing the national reserves of tungsten ore.

Introduction

The Sweeney Tungsten Company, under the management of Earl G. Sweeney, applied to DMPA on November 13, 1951 for a production loan of $135,387 to purchase mining and milling equipment for the Rainbow Tungsten prospect in Riverside County, California. The request was denied because of insufficient ore reserves. The company then applied to DMEA in December 1951 for an exploration loan of $27,435 to explore the deposit. At the request of DMEA, L. D. Clark and W. P. Irwin of the Geological Survey examined the deposit in the company of Sweeney during the evening of February 29 and the morning of March 1, 1952.

The Rainbow Tungsten prospect is at an altitude of 2600 feet in the western part of the Chuckwalla Mountains, about 8.5 airline miles S. 15° W. of Desert Center, Chuckwalla Quadrangle, Riverside County, California. (See plate 1). It is readily accessible by a fair desert road that extends about 10 miles southeasterly from U. S. Highway 60 at a point 9 miles west of Desert Center. The last two miles of road is in a gravel wash, but can be traveled by two-wheel drive vehicles.

No tungsten has been produced from the Rainbow prospect, although several hundred units of WO3 have been produced since the beginning of World War II from deposits nearby. According to Sweeney, six small tungsten mines in the Chuckwalla Mountains were in operation during World War II.

The Rainbow property consist of three claims, the Rainbow Nos. 1 and 2, and the Lucky Penny (see plate 2). At the time of examination there

were three cabins in fair condition on the property, as well as a rented bulldozer, several trucks, a compressor, and miscellandous small mining equipment.

Geology

The Rainbow prospect opens a quartz vein in coarse-grained gneiss. The vein and the foliation of the gneiss are essentially vertical. (See plate 2). The vein is more than 3000 feet long, and, where exposed, ranges from 9 to 30 feet in thickness, with an average thickness of about 15 feet. The vein is more resistent to erosion than the enclosing gneiss, and is reasonably well exposed along most of its length. South of the dry wash that crosses the vein it appears to have been displaced about 25 feet to the west along a cross fault.

Scheelite is the only tungsten-bearing mineral that was seen. It occurs as fine grains scattered throughout most of the quartz and inclusions of wall rock, but, in general, is most abundant in a zone several feet wide along the west wall. Where exposed, the zone contains an estimated 0.3 to 0.5 percent WO_3, whereas, in general, the remainder of the vein contains 0.1 to 0.2 percent WO_3. In places the quartz seems to be barren.

General features of the vein are shown in plate 3. In the wash cut the scheelite-bearing part of the vein is bordered on the left by 18 inches of massive quartz, which contains no scheelite but is reported to contain some low gold and silver values. The bulk of the vein at this cut consists of anastomosing quartz stringers that invade a sheared aphanitic black rock, presumably a basic dike that intruded the gneiss prior to formation of the vein. To the left, the vein feathers into country rock. Elsewhere the west wall of the scheelite-bearing rock is sharp, and to the east the ore grades into barren rock through a distance that ranges from 2 to 12 feet.

The vein is not exposed well enough to permit the delineation of ore shoots, although it is apparent that the scheelite is not uniformly distributed, for the part of the vein near the west wall generally is richer. A possible ore shoot is exposed in the wash cut (see plate 3) where scheelite is distributed across the entire 9-foot thickness of the vein. This part of the vein is estimated to contain 0.5 percent WO_3. A 5-ton sample, reported to have been taken from this cut for a mill test, is reported by Sweeney to have assayed 0.44 percent WO_3. The vein does not hamp as well near the surface as in the bottom of the cut.

The Forrest shaft (see plate 4) is 14 feet deep in the vein. At a depth of 7 feet the vein is reported to assay about 0.16 percent WO_3 over a thickness of 9 feet. At the bottom of the shaft, it is estimated to contain between 0.3 and 0.4 percent WO_3 over a thickness of 7 feet, by comparing the lamping qualities with those of the 9-foot assayed section. The north-heading adit, about 75 feet north of the Forrest shaft, is in nearly barren quartz, and is north of the portion of the vein to be considered under the request for exploration funds.

The vein is poorly exposed for a distance of 1000 feet south of the "wash" cut. The rattlesnake cut opens only the west wall of the vein which is estimated to contain a little less than 0.5 percent WO_3. Isolated outcrops of quartz near the rattlesnake cut show from a trace to as much as 0.2 percent WO_3.

At the south end of the poorly exposed part, the vein forms a bold outcrop. The quartz in a shallow-cut at the base of the outcrop lamps about 0.3 percent WO_3 over a width of 18 feet measured from the west wall of the vein. Over a width of five feet measured from the west wall, it lamps between 0.4 and 0.5 percent WO_3. East of the 18-foot width it grades into quartz containing less than 0.1 percent WO_3. From the shallow cut to the top of Red Butte, the vein forms nearly continuous bold outcrops locally separated by a thin mantle of soil. The top of the Red Butte marks the southern limit of the portion of the vein to be considered under the exploration loan.

The south-heading adit near the top of Red Butte is in a shear zone vein. It was dug in search of silver and gold, and exposes no tungsten-bearing rock. At the surface to the east of the tunnel and along the top of Red Butte, scheelite is exposed in the quartz most abundantly along the west wall of the vein.

The grade of the scheelite-bearing rock is difficult to determine in parts of the vein that do not present freshly broken faces, owing to thin films of desert varnish and caliche that coat the rocks. The average grade of much of the vein that was otherwise fairly well exposed could not be determined during the time available for the examination.

Mr. Sweeney believes that in general, the grade of the vein materially increases at depth, owing to leaching of the scheelite from the rather highly fractured quartz vein near the surface. He cites the fact that in both the wash cut and Forrest shaft the vein contains considerably more scheelite at the bottom of the workings than near the surface. The writers could not determine whether the increase in grade with depth was due to an irregularity in primary mineralization or to leaching.

Ore Reserves

Reserves of measured ore are negligible, but a considerable tonnage of low grade ore can be inferred from the grade, length, and width of the vein. The deposit is estimated to contain 2000 tons of inferred ore with a grade of 0.25 percent WO_3 for each foot of depth, assuming that the vein contains 0.25 percent WO_3 for an average width of 10 feet for a length of 2000 feet. If the deposit continues to a depth of 100 feet, it would contain 200,000 tons of ore with a grade of 0.25 percent WO_3, using the same assumptions. It is probable that the grade of ore could be increased to between 0.3 and 0.4 percent WO_3 by mining an average width of only 5 feet along the west wall, rather than 10 feet, with a corresponding decrease in tonnage. According to the standard engineering practice of using one-half the length for the inferred depth, the deposit could be considered to

extend to a depth of 1000 feet, and contain a reserve of 2,000,000 tons of inferred ore with a grade of 0.25 percent WO_3, or 500,000 units of WO_3. It is questionable whether such practice is valid in this case, but is mentioned merely to point out the conceivable magnitude of the deposit.

Exploration

Sweeney feels that at present there is a sufficient reserve of ore indicated to warrant building a mill. He applied for a loan to explore the deposit to satisfy Government requirements for obtaining a production loan. Although he presented an exploration plan in his application he stated his willingness to modify the plan to conform with any reasonable alternative plan suggested by the Government.

Sweeney's plan consists of the following work:

1. Sink 75 feet on the Forrest shaft, and at the bottom drift 50 feet north and 50 feet south.
2. Drift 50 feet north from the wash cut.
3. Strip overburden for 300 feet north of the shallow cut near Red Butte, and open cut the vein at the north end of the stripped area.
4. Strip the soft west wall of the vein as deeply as possible near the top of Red Butte, and crosscut the vein by two adits, each 15 to 30 feet long, and spaced 50 to 100 feet apart.
5. Sink a 100 foot shaft in the shallow cut, and drift 50 feet south at the bottom.
6. Repair the last 2 miles of road to the camp, and from the camp build a road 4000 feet to Red Butte.
7. Dismantle and move two cabins and other equipment 50 miles to the prospect.

The main criticism of Sweeney's plan is (1), it disregards the least known part of the vein, the middle third; (2) it does not make use of sufficient surface exploration, and (3) it would give no information as to the possible depth of the deposit. The road work requested is unnecessary, as the road to the camp is suitable for standard passenger-type vehicles. Since the date of application, a road suitable for two-wheel drive trucks has been built to within a few hundred feet of the top of Red Butte. At the time of examination the housing facilities were sufficient for the present crew of seven men.

Exploration of the deposit should consist of two separate phases. The first phase should consist of surface trenching and sampling to determine the bulk grade of the deposit, and to determine the outline and grade of ore shoots that are probably present. The second phase should consist of exploration at depth to indicate sufficient reserves to warrant a production loan, and would be contingent on the first phase. If satisfactory completion of the first phase gave a sufficient indication of reserves, the second phase would not be necessary.

The first phase would consist of crosscutting the vein with trenches spaced at approximately 50-foot intervals. The trenches should cut the entire width of the vein to a depth of several feet in bedrock in order to minimize the possible effect of surface weathering or leaching. The average depth of overburden is estimated to be about 2 or 3 feet. The total number of trenches required would be about 35, considering that in some places the vein has already been cut. With an average length of 15 feet, and an estimated cost of $5.00 per foot, the trenches would cost $2625. Assaying of about 70 samples cut across the vein, at $4.00 per assay, would cost $280. The total cost of the first phase should not exceed $4,000 including small miscellaneous items.

A detailed procedure for the second phase would be premature before completion of the first phase of the work. The second phase should be to explore any ore shoots discovered in the first phase to prove sufficient reserves to warrant the erection of a mill at the property. As Sweeney plans to erect a 100-ton mill, a 3-year supply of ore, about 90,000 tons, should be indicated before erection of the mill. Several tentative, alternate plans are suggested, but have certain deficiencies in common with Sweeney's exploration plan.

One plan is to drift 1000 feet south from the Rattlesnake cut along the west wall zone of the vein. This would give an average back of about 100 feet, and would cost $25,000 at $25.00 per foot of drift. Another plan is to crosscut to the vein from a point about 200 feet east of, and 100 feet below, the shallow cut. A 400-foot drift from the crosscut could then be driven below Red Butte, with an average back of 125 feet. As a part of the same plan, the Forrest shaft could be sunk an additional 75 feet with drifts 50 feet to the north and south. The total cost of this plan would be about $21,000 including 700 feet of horizontal workings at $25.00 per foot, and 75 feet of shaft at $45.00 per foot.

Core drilling has been considered as a possible method of exploring the deposit, but core drilling is believed to be less suitable than tunneling. Sweeney has a mining crew employed at the property, and owns most, if not all, of the necessary mining equipment. He plans to pay for his share of exploration costs by furnishing equipment and labor. It is doubtful that he could supply sufficient funds to pay his share for the drilling program. He has had considerable experience in mining and milling tungsten ore, and seems to be thoroughly competent to conduct the exploration program.

It is evident that the deposit cannot be throughly explored with the funds Sweeney requested. A thorough exploration, however, may be desirable in the interest of national defense if the first phase of the recommended exploration proves encouraging. At such a time, a Government core-drilling program may be desirable to define the limits of the scheelite-bearing quartz in order to increase the known national reserves of tungsten ore.

Plate 3. View of wash cut, looking north along strike of vein. Left wall of cut formed by $1\frac{1}{2}$ foot thickness of quartz that does not contain scheelite. Nine foot section of vein at face of cut lamps 0.5 percent WO_3. Note approximately vertical attitude of vein, and vertical foliation of gneiss above man's head.

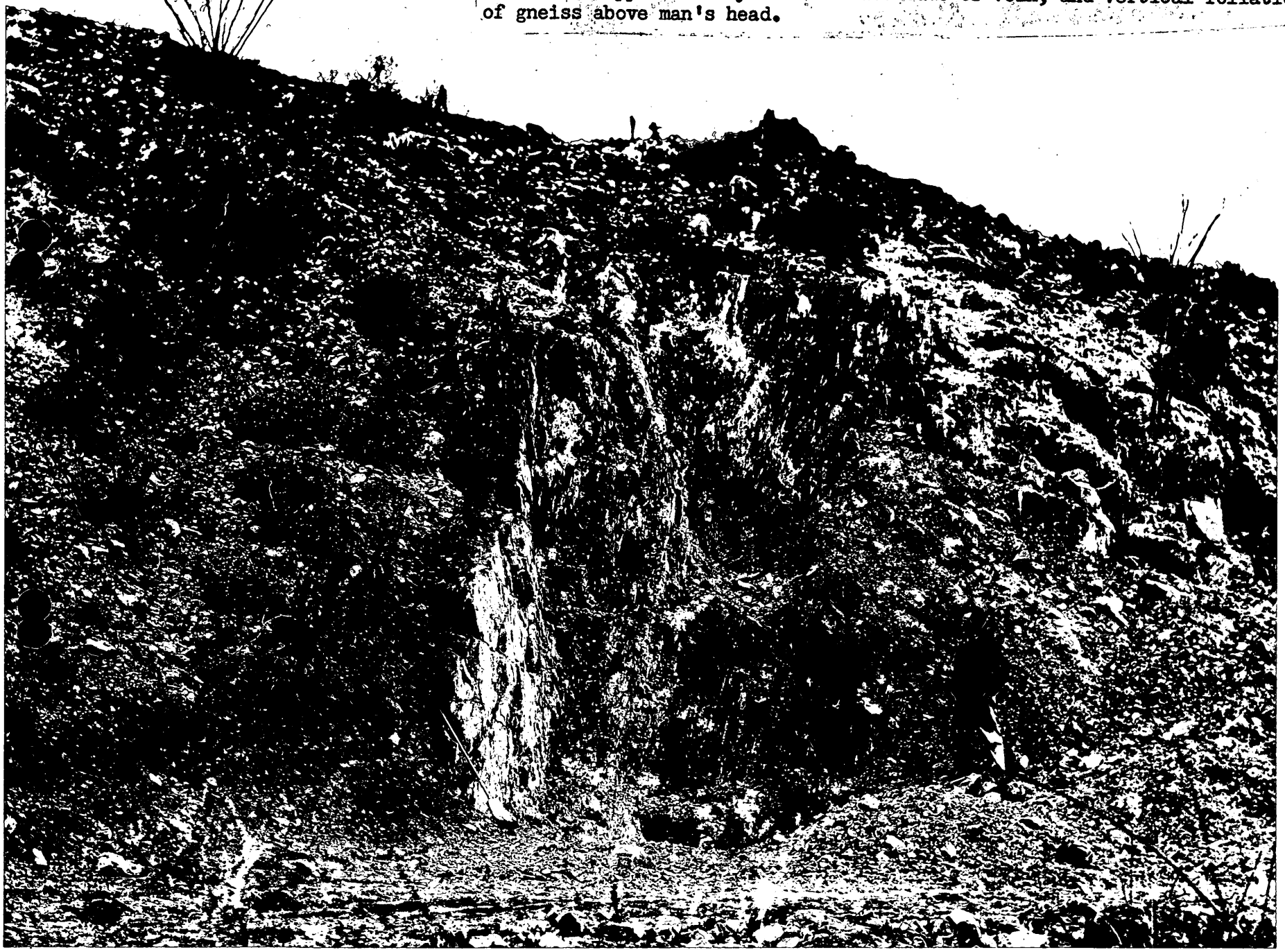


Plate 4. View looking north along strike of vein. Forrest shaft is in foreground, [illegible]-foot adit. [illegible] outcrop and vertical attitude of vein.

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

FEB 7 1952

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 Sweeney Tungsten Company, Ltd.

Docket No. DMEA 2353

Commodity Tungsten

Amount $ 27,435.00

Please expedite consideration of the application with particular reference to the points raised in the attached "Review".

Sincerely yours,

C O Mittendorf

ACTING Chairman, Operating Committee
Defense Minerals Exploration
Administration

APPROVED:

O. H. Hedges
Member, Bureau of Mines

T. P. Thayer
Member, Geological Survey

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 14 1952

Defense Minerals Administration

Review of Application for Exploration Assistance

Docket No. 2353

Commodity Tungsten

Total Amount $27,435.00

Govt. Participation $20,576.25

1. Name and Address of Applicant Earl G. Sweeney, c/o Sweeney Tungsten Company
1508 W. Commonwealth, Fullerton, California

2. Location of Property Riverside County, California
Red Cloud Mining District
Chuckawalla Mountains

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 Requires 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 (Owner)
(question 5, 6, 7)*

6. If applicant is a lessee, is a copy of the lease attached? -----

Does the lease have sufficient time to run to cover a future productive period? -----

*question numbers are those of MF-103

7. Are subordination agreements necessary? No

a) MF-201? Not applicable

b) MF-202? Not applicable

8. From the data presented, does the proposed project appear feasible from the point of view of:

a) Available manpower Yes

b) Equipment and supplies Yes
(question 14 plus general knowledge of availability)*

c) Accessibility (question 12)* Yes

d) Water (question 13)* Yes

e) Power (question 13)* Yes

Is a field check needed on any of these points? Field team should check on a,b,c,d,e, with owner

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? **Costs should be checked in field**

Can they be summarized, as on page 2 of Procedural Instruction 5-A, from the available data? **No** If so, attach a draft.

e) Are the cost estimates reasonable? **Requires field check**

f) Should more information be requested from applicant? **Yes - By field team**

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? **Requires field check**

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? **Requires investigation**

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? Field team should prepare preliminary map of the deposit, obtain sufficient geological information, enough samples to show grade of ore and if possible, the distribution of the scheelite. Check on the feasibility of the project and/or offer an alternate program of exploration, if a better program appears indicated. Check on the competence of the operator. Check applicant's statement of "200,000 tons of ore in sight". Check on applicant's plans for milling.

Reviewed by: Glenn G. Gentry

Date 2/1/52

FILE COPY
SURNAME:

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

FEB 7 1952

Mr. Earl G. Sweeney
Sweeney Tungsten Company, Ltd.
1508 W. Commonwealth
Fullerton, California

Re: Docket No. DMEA 2353X - Tungsten
Rainbow Mining Claims
Riverside County, California

Dear Mr. Sweeney:

Your application for assistance in exploring the Rainbow Mining Claims, situated in the Chuckawalla Mountains, in Riverside County, California, Docket No. DMEA 2353X, 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.

Sincerely yours,

C. O. Mittendorf (for)

Acting Administrator
Defense Minerals Exploration
Administration

GGGentry'lm
2/1/52

2-7-52
J.D.

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.

January 31, 1952

Memorandum

To: George C. Selfridge, DMEA

From: D. M. Lemmon, U.S.G.S.

Subject: Exploration application $27,435 DMEA 2353 - Tungsten
Sweeney Tungsten Co. Ltd.
1508 W. Commonwealth
Fullerton, California

Property: Rainbow claims
Chuckawalla Mountains
Riverside County, California

Mr. Sweeney applied to DMPA on November 13 (Received December 17) for a production loan of $135,387 (DMPA 2247). This request was denied because of insufficient ore reserves.

Proposal:

2 shafts, total 175 feet
4 drifts, total 200 feet
2 crosscuts, total 50 feet
2 open cuts
2 cabins
1 access road 4000 feet long

Drifts - Shafts
50 - 50 75
50

Geology:

This property has not been examined by the Geological Survey. Scheelite occurrences have been known from the region for a number of years.

According to the application, scheelite is present in a quartz vein in limestone. The vein averages 12 feet in thickness and can be traced approximately 3,500 feet. Content of WO_3 is not known. The applicant estimates the average to be 0.25 percent of WO_3. One lot of 5 tons assayed 0.44 percent.

No information is given about possibilities of ore shoots within the vein, or about possible influence of structure in the country rock.

1 copy [illegible]

Sufficient work has probably not been done at the surface to warrant the underground work proposed.

Recommendation

It is recommended that this docket be referred to the field for examination of the deposit. The field team should be asked to obtain information on geology, grade and distribution of scheelite, feasibility of the proposed exploration or of a substitute program, and competence of the operator.

Dwight M Lemmon

The operator, Mr. Sweeney, owns considerable other construction and milling equipment not included or used on the contract.

Labor and Supervision: The crew working on the contract include the following:

Mr. Earl G. Sweeney, Superintendent
Mr. Elmer Tubbs, Partner and Laborer
1 - Miner
1 - Mucker

This crew is practically sufficient for the first stage of the work. The one miner assists the mucker and laborer when available.

Mr. Sweeney intends to supervise the sampling of the vein at the trenches. Large channel cuts normal to the dip and strike of the vein are to be taken. Tungsten determinations are to be made by the Smith-Emery Company of Los Angeles, California.

Bureau of Mines publications describing trenching and sampling at tungsten projects were shown to Mr. Sweeney. The employment of an experienced sampler was suggested.

The first stage of the work was being carried on in a workman like manner to the date of the first inspection; however, the operator is anxious to enter into the second stage of the work since allowable charges to the Government would be much higher, and also he would be able to concentrate his efforts at fewer places.

Some geologic data has been obtained. Trenching operations indicate the existence of a vein from a foot to a maximum of twenty feet in width and along strike lengths of 500 feet. The vein is highly siliceous and contains but little scheelite. Traces of gold and silver were found in all samples that were taken by the engineer. The continuity of the vein on sections covered by deep overburden could not be determined.

SAMPLING AND ASSAYING

See map Figure 1 including sample locations and assays.

There is practically no tungsten ore in the vein. Scheelite values are too low to be of commercial importance.

Mr. Sweeney had a 5 ton sample milled from vein material mined from the Canyon and Forrest shaft locations. A metallurgical test was run on this sample. Mr. Sweeney showed the engineer approximately 16 pounds of 68% WO_3 concentrate recovered by the test. This 5 ton sample would not constitute ore at this property. 0.109% on mining basis

OTHER INFORMATION

The advisability of sinking prospect pits through two sections of overburden from 5 to 20 feet in depth at the locations mentioned above would be of some importance, however, since sample assays show low scheelite content at other parts of the vein the work is not warranted.

Benjamin H. Sheahan

Benjamin H. Sheahan
Mining Engineer.

EXPLORATION

Subject: DMEA-2353
Re: Exploration Loan
Rainbow Nos. One & Two

Mr. Earl G. Sweeney, General Partner
Sweeney Tungsten Company, Ltd.
1508 W. Commonwealth
Fullerton, California

My dear Mr. Sweeney:

This will acknowledge receipt of your application dated January 23, 1952 for a loan under the Defense Production Act of 1950.

Your application was assigned Docket Number DMEA-2353 and referred to the Iron & Ferro-Alloys Division.

Kindly refer to DMEA-2353 in any future correspondence relating to your application.

Sincerely yours,

ROBERT E. ADAMS

Robert E. Adams
Acting Administrative Officer

7862

DMEA 2353 - Sweeney Tungsten

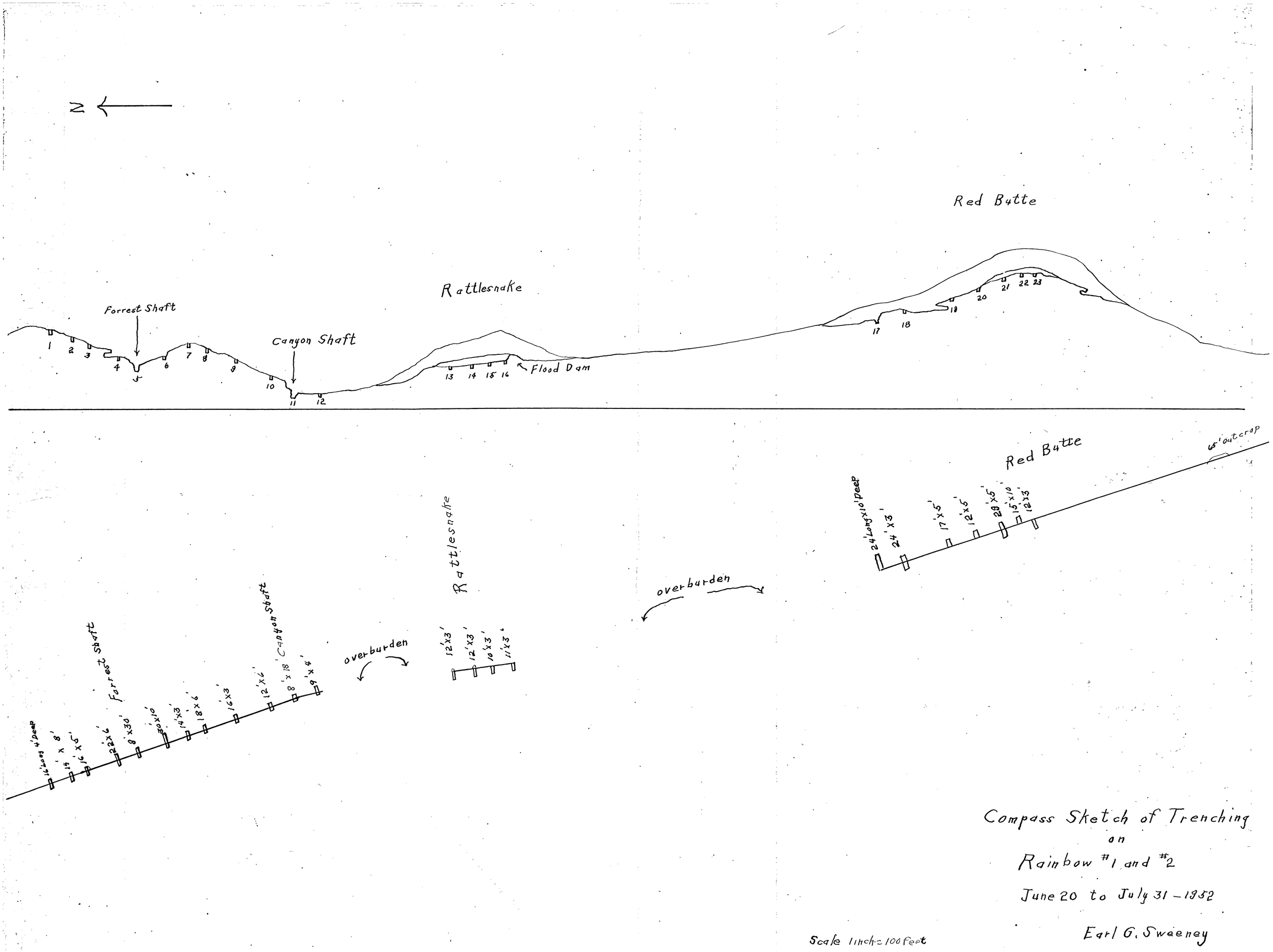
Trenches

	Length	Depth	Width	Volume cu. ft.
1	16	4	3	192
2	16	5	3	240
3	23	6	3	414
4	22	6	3	396
5	Forest shaft	30		
6	30	10	3	900
7	14	3	3	126
8	18	6	3	324
9	16	3	3	144
10	12	6	3	216
11	Canyon shaft	4		
12	9	4	3	108
13	12	3	3	108
14	12	3	3	108
15	10	3	3	90
16	11	3	3	99
17	24	10	3	720
18	24	3	3	216
19	17	5	3	255
20	12	5	3	180
21	28	5	3	420
22	15	10	3	450
23	12	3	3	108
24				
25				
26				
27				
28				
29				
30				

FT report said 14' average

28

392 feet trenching



Compass Sketch of Trenching
on
Rainbow #1 and #2
June 20 to July 31 – 1952

Scale 1 inch = 100 feet

Earl G. Sweeney