DEFENSE MINERALS EXPLORATION ADMINISTRATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF REVIEW

I have reviewed the Monthly Reports of:

Carolina Tungsten Mining Company
5005 Edgemoor Lane
Bethesda 14, Maryland
and
P. O. Box 1251
Concord, North Carolina

pertaining to Exploration Project Contract No. Idm-5869, Docket No. DMEA-3742, including Amendment Nos. 1 and 2, for the months of February 1956 to October 1956, inclusive, covering a project for the exploration of tungsten ore on property, known as the Furnice Mine, located in Cabarrus County, North Carolina.

My review included an examination of the Monthly Reports (Forms MF-104) and supporting documents attached thereto, comparison of the costs claimed with the contract and pertinent schedules, verification of work performed by reference to Field Team reports and correspondence, and a determination of the reasonableness and propriety of the costs.

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

all of the costs incurred were under a contract provision for payment by the Government on the basis of fixed unit costs of work actually performed.

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

Total cost as billed by Contractor		$14,087.50
Exceptions:		
By DMEA Finance Officer	$ -0-	
Herewith	-0-	-0-
Total Accepted Cost		$14,087.50

The contract calls for a 75 percent participation of exploration expenses by the United States Government. Therefore, payment to the contractor by the Government in the amount of Ten thousand five hundred sixty-five and 62/100 Dollars

$10,565.62

is considered valid and proper, provided 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.

E. D. Talbert

May 14, 1957 E. D. Talbert, Auditor

MAY 14 1957

Mr. Robert A. Lawrence
Executive Officer
DMEA Field Team, Region V
Room 14, Post Office Building
Knoxville 2, Tennessee

Re: Docket No. DMEA-3742 (Tungsten)
Carolina Tungsten Mining Company
Pamlico Mine
Cabarrus County, North Carolina
Contract No. Idm-2869

Dear Mr. Lawrence:

Enclosed are the original and two copies of a Report of Review prepared in accordance with the request contained in your memorandum of May 9, 1957.

If you concur with the facts stated in this report, normal distribution should be made. Otherwise, all copies should be returned to this Division.

Sincerely yours,

(Signed) E. D. Talbert

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

Enclosure

EDTalbert/wb
May 14, 1957

Copy to: Docket
Admr. Reading File
Mrs. Helen R. Miller
Mr. Chambers

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

May 9, 1957

Memorandum

To: Mr. Jay L. Chambers, Chief Contract Administration and Audit Division, DMEA - Washington

From: DMEA Field Team, Region V - Knoxville, Tenn.

Subject: DMEA-3742, Idm-E869, Tungsten.
Carolina Tungsten Mining Co. Phoenix & Furniss Mines, Cabarrus County, N.C. Request for Report of Review.

A termination agreement, effective November 9, 1956, has been forwarded to the Operator of the subject contract for signature. The October 1956 voucher is the final one for this contract. Please issue a report of review. The Operator's final engineering and geologic report has been received and the following units of work have been completed and verified by the field examiners:

122 ft. of drift work to the southwest
157 ft. of drift work to the northeast
500 ft. of horizontal diamond drilling size AX
25 samples analyzed

Robert A. Laurence
Robert A. Laurence
Executive Officer, DMEA-Region V

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

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 13 1957

DATE	INITIALS	CODE
5-13	C	220
		800

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.
ROOM 107 POST OFFICE BLDG
KNOXVILLE 2, TENN.

RECEIVED DEC 14 1956 D.M.E.A.

December 12, 1956

Memorandum

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

From: Field Team, DMEA, Region V, Knoxville, Tennessee

Subject: DMEA-3742, Ida-E869 (Tungsten)
Carolina Tungsten Mining Co.
Furnise-Phoenix Mines, Cabarrus County, North Carolina

On December 8, Mr. Paul M. Tyler wrote as follows:

"I have delayed thanking you for your letter of November 16th in the hope that meanwhile I might develop a definite proposal for further work on our Phoenix property. However, we are having financial troubles and I frankly don't know when or if we shall be in a position to resume operations. We have some encouragement but nothing at all definite. For almost two months we have merely kept our foreman, Pete Nash, on the payroll, but no further work has been done.

"Would it be possible to postpone termination of our Contract, which you kindly agreed to recess, for say three months more? The last amendment calls for completion of all work by December 31, 1956 and I realize that you would rather not have too many idle contracts, but as long as there is a chance of our getting going again I should like to have an opportunity to present a new proposal."

We suggest postponing termination of the contract until Mr. Tyler makes a definite decision concerning a proposal for additional work. At present, it seems doubtful that a workable proposal will be submitted, but we might as well give him the benefit of the doubt.

Robert A. Laurence
Executive Officer

V. J. Lynch, Member
Bureau of Mines

RAL/mg
cc - Operating Committee (2)
Lynch
Shirley
File

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

RECEIVED DEC 14 1956 D.M.E.A.

December 12, 1956

Mr. Paul M. Tyler
5005 Edgemoor Lane
Bethesda 14, Maryland

Re: DMEA-3742, Idm-2869 (Tungsten)
Carolina Tungsten Mining Co.
Furniss-Phoenix Mines
Cabarrus County, North Carolina

Dear Paul:

As requested in your letter of December 8, we will take no definite action on termination of the Furniss contract for the time being. Unless Washington office objects, we will hold it in abeyance for awhile, until you reach a definite decision concerning a proposal for additional work to be done at the Phoenix.

Thanks for sending the two thin sections. I will return them after we have studied them. Mr. Bergman is in the field now, and I know he will want to see them.

Sincerely yours,

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

RAL/mg
cc - Operating Committee (3)
Mr. V. J. Lynch
Mr. L. E. Shirley
File

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

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

PART C. VOUCHER & SCHEDULE OF PAYMENTS K-

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of October, 1956 Docket No. DMEA 3742 Contract No. Idm-E869
Operator's Name Carolina Tungsten Mining Co Minerals Tungsten
Address P. O. Box 1251, Concord, N. C.
Contract Amount, $ 26,400- Government Participation: 75% Amount, $ 19,800-

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	0	$3,500.00	$3,500.00			
Bulldozing						
Crosscutting						
Drifting	0	10,462.50	10,462.50			
25 Analyses @ $5	$125.00	0	125.00			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$125.00	$13,962.50	$14,087.50	125.00	13962.50	14087.50

RECEIVED NOV 16 1956 D.M.E.A.

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 11/1/56 *Payee Carolina Tungsten Mining Co.
Per Paul M. Tyler Title 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:
$ 93.75
Signature Helen R. Miller
(Authorized Certifying Officer)
Date NOV 14 1956 Vou. No. 14
(See other side)

31.25

(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. E869 in accordance with the terms of the contract.

Signature S. C. Bergman Title GEOLOGIST, U. S. G. S. Date 11/5/56

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Kamen Title EXECUTIVE OFFICER DMEA REGION V Date NOV 13 1956

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.

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

RECEIVED NOV 16 1956 D.M.E.A.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of October 195 6 Docket No. DMEA 3742 Contract No. Tcm- 286
Operator's Name Carolina Tungsten Mining Co Minerals Tungsten
Address P. O. Box 1251, Concord, N. C.

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting	ft.	0	0	$10,462.50	279	$37.50	600	$37.50
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core	ft.	0	0	3,500.00	500	$7.00	500	$7.00
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Assays	Ea.	$125.00	25	125.00	25	$5.00	80	$5.00
TOTAL DISTRIBUTED COSTS		$125.00	25	$14,087.50				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		$125.00	25	$14,087.50				

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

Date 11/1/56 Operator Carolina Tungsten Mining Co.
Per Paul M. Tyler Title Partner

REMARKS:

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

(Instructions on reverse)

(For Government use only)

S. C. Bergman GEOLOGIST, U. S. G. S. 11/5/56

INSTRUCTIONS

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

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

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

GPO 872894

(c) Narative Report--October 1956: DMEA 3742, Idm E869

Carolina Tungsten Mining Co., P.O.Box 1251, Concord, N. C.

Early in October, all drills, track, pipe, tools, and pumps were removed from the Furniss Mine, preparatory to moving to the Phoenix Mine. A millsite has been selected near the Furniss shaft which may serve as a source of water for milling but no mining or further prospecting is contemplated at this mine.

As a final check on the material from the supposed "ore shoot" in the Southwest drift of the 170 level, a careful sample(about 300 pounds) of the separate muck pile from this location was taken and hand screened with the following results:

Plus 1"	55.4%
Minus 1" plus ½"	18.0%
Minus ½"	26.6%
	100.0%

RECEIVED 1956 E.A.

Since the scheelite and pyrite content of the intermediate size appeared to be little or no better than that of plus 1" material the two fractions were combined, representing 73.4% of the total sample. The large lumps were hand sledged to about 1" and after coning and quartering twice, the material was put through the lab. jaw crusher and riffled down to about 30 lbs. in the Jones sampler. The minus ½" fraction was likewise riffled to about 30 lbs. and each sample was ground to about 10-mesh, riffled again several times, and put through the planetary grinder again before splitting the final assay samples. Assay results follow:

	Gold oz/T	Silver oz/T	WO_3 %	$BaSO_4$ %
Plus ½", 73.4%	0.04	0.86	0.015	1.06
Minus ½", 26.6%	.08	.67	.050	1.80
Composite(calc'd)	0.05	0.81	0.024	1.26

Since both the gold and tungsten values in these ores are quite spotty, we have had difficulty in getting comparable results. In respect to samples from the Phoenix Mine we have had reports from different assayers on the same sample that differed by an order of magnitude and 100% variations were quite common. Accordingly, in respect to the Furniss Mine I have made rough checks of samples on a Wilfley table as well as by hand panning. Last April we ran a test on several tons of muck from the 170 SW drift with the following results:

	Gold Oz/T	Silver oz/T	Copper %	WO_3 %
Feed(previously reported)	0.04	0.86	0.03	0.27
Oversize, ½ - 1 in.	.06	.40	.04	.01
Oversize, minus ½ in.	.06	1.06	.02	.03
Mids from Hg pan	.12	.46	.16	.05
Mids from bottom pans	.~~04~~16	1.~~64~~16	.1~~2~~0	.08~~04~~
Sluice product	.04	1.64	.11	

The foregoing data appear somewhat inconsistent due to the nature of the test and the high assay of the "feed sample"(which was previously screened through ½") is highly questionable. However, it is believed that this test demonstrated that the muck from the drift at that time could not be classed as ore. No appreciable amount of gold was caught on the amalgam plate.

On the attached voucher claim is made for compensation in respect to the 7 samples reported in this narrative report and for 18 samples reported in the table in our report for September, making a total of 25 samples at $5 each, or $125.

In contrast to the Contract rate of $5.00 for each sample, we have paid $2 per assay for gold-silver, $3.50 for tungsten, $2 for copper, and $3.50 for barium to the Bruce Williams Laboratories, Joplin, Mo. Other assayers charge $5.00 for tungsten (Colorado Assaying Co.) up to $15(Lucius Pitkin) or more. At our minimum rate, therefore, complete information regarding a sample costs $11 for assayer's charges alone. The average cost of preparing a sample for assay is probably at least $10.

In addition to the samples for which payment is asked herein, we have had 15 or more samples assayed representing extensions of other veins on the property and the work done at our expense and without Contract authorization on the 100 level of the Furniss Mine. No claim is made or will be made for payment in respect to these samples.

A "Final Report" has been written in accordance with Article 6(c) of the Contract and is being forwarded in the same envelope with this Voucher.

Although no further work is contemplated in the Furniss Mine, we are requesting that the Contract be recessed and not terminated until consideration is given to a request which we propose to make for employing the unexpended funds for explorations in or near the Phoenix Mine.

Respectfully submitted,

Paul H. Tyler

Paul H. Tyler, Partner

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

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

PAID ON VOUCHER & SCHEDULE OF PAYMENTS

RECEIVED

OPERATOR'S MONTHLY REPORT AND VOUCHER

OCT 19 1956

Month of September 1956 Docket No. DMEA 3742 Contract No. Idm-E 869

Operator's Name Carolina Tungsten Mining Co. Minerals

Address P.O. Box 1251, Concord, N.C. Tungsten

Contract Amount, $26,400.00 Government Participation: 75% Amount, $19,800.00

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 375 ft @ $7.00	$2,625.00	$1,260.00	$3,885.00	2240.00	1260.00	3500.00
Bulldozing						
Crosscutting						
Drifting 6 ft. @ $31.50	225.00	10,125.00	10,350.00	337.50	10,125.00	10,462.50
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$2,850.00	$11,385.00	$14,235.00	2577.50	11,385.00	13,962.50

RECEIVED NOV 7 1956 D.M.E.A.

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

Date Oct. 17, 1956 *Payee Carolina Tungsten Mining Co.

Per Paul M. Tyler Title 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:

$ 1933.13

Signature Helen R. Melin
(Authorized Certifying Officer)

Date NOV 5 1956 Vou. No. 61

(See other side)

64438

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E 869 in accordance with the terms of the contract.

Signature S. C. Bergman Title Geologist, USGS Date 10/16/56

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lawrence Title EXECUTIVE OFFICER DMEA REGION V Date OCT 26 1956

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.

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

Budget Bureau No. 42-R1036.5

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

RECEIVED NOV 1956 DMEA

Month of September 1956 Docket No. DMEA 3742 Contract No. Idm-E869
Operator's Name Carolina Tungsten Mining Co Minerals
Address P.O. Box 1251, Concord, N.C. Tungsten
Contract Amount, $ 26,400— Government Participation: ____% Amount, $ 19,800—

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 375 ft. @ $7.00	$2,625—	$1,260—	$3,885—	2240.00	1260.00	3500.00
Bulldozing						
Crosscutting						
Drifting 6 ft. @ $37.50	225—	10,125—	10,350—			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$2,850.00	$11,385.00	$14,235.00			

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

Date Oct. 12, 1956 *Payee Carolina Tungsten Mining Co

Per Paul M. Tyler Title 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:

$_____

Signature _____
(Authorized Certifying Officer)

Date _____ Vou. No. _____
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E869 in accordance with the terms of the contract.

Signature S. C. Bergman Title Geologist, USGS Date 10/16/56

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lamanna Title EXECUTIVE OFFICER DMEA REGION V Date OCT 26 1956

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.

(c) Narrative Report --September 1956: MERA 3742 Ken-38

Carolina Tungsten Mining Co., P. O. Box 1951, Concord, N. C.

RECEIVED OCT 19 1956

Upon completion of the underground d. d. core drilling on October 6th all work under our amended contract was terminated and the pumps were pulled from the Burnies Shaft on October 11, 1956.

As noted in our August report the Northeast drift on the 170 level was stopped at 117 feet instead of following the vein which was picked up beyond the fault zone. According to our measurement a total of at least 123 feet of advance was made in this drift but in view of the various twists developed and my decision to put in a crosscut to pick up a vein immediately beyond the fault we have reported a total advance of only 116 feet under our contract.

Inasmuch as I had found another vein in our first crosscut which I drew before starting work at the original face of this drift, I surmised that the vein we encountered beyond the fault might be either this vein or the stringer that we had followed before encountering the fault zone. Accordingly I authorized the driller to core drill for one day from the second crosscut due east. He made a total of 25 feet without encountering another vein, hence it is assumed that this is actually the vein encountered in the Bureau of Mines drill holes MW 4, 5, and 5a. I am not sure, however, what relation, if any, this vein bears to those found on the southwest side of the fault zone.

During September only two more rounds were shot in the Southwest drift, resulting in a net advance as indicated by Mr. Bergman's measurement of but 123 feet from the starting point last spring. The advance for month, therefore, is reported herein as 6 feet which is only two feet less than the cumulative advance as indicated by our measurements which were affected by the change in strike of the vein. No improvement was observed in the mineralization. Channel samples were taken at regular intervals from the back of the drift over the total distance covered by the contract work. It happened that these sampling points, approximately at 20 foot intervals, came at poorly mineralized portions of the vein but since the results were so poor, a closer sampling distance did not seem justified. Results of assays of these samples together with pertinent data from earlier assays are summarized below:

Description	Gold oz/T	Silver oz/T	Copper %	WO_3 %	SnO_2 %
Channel samples 170SW--					
0 ft. from starting point, 8" qtz.	0.04	0.02	-	.04	-
15 ft. " " " 20" qtz.	.02	.02	-	.01	
35 ft. do. 8" qtz	.10	.09	-	.05	-
55 ft. do. 8" qtz	.28	.06	-	.02	-
80 ft. do. 8" qtz	.10	.59	-	.05	-
100 ft. do. 36" vein(7" qtz)	.02	.08	-	.04	0.04
113 ft. do. 36" vein(8" qtz)	.02	.12	-	.03	-
120 ft. do. 10" vein (face)	.03	.04	-	.03	4.53
Original heading 170SW, 10"	.04	.62	0.06	.07	-
~~170SW much sample, 10" 1/2", 5/10~~	~~.04~~	~~.06~~	~~.03~~	~~.07~~	~~-~~
~~170SW. composite since 9 Sept 6/6~~	~~.04~~	~~.62~~	~~-~~	~~.02~~	~~-~~
	~~.04~~	~~.64~~	~~-~~	~~.01~~	~~-~~

RECEIVED
OCT 10 1956

Summary Table, Furniss Mine Assays, continued

	Gold Oz/T	Silver oz/T	Copper %	WO3 %
Composite 170 level muck, NE &SW, May 10th				
Minus ½"	0.04	0.68	-	0.02
Plus ½" minus 2"	.04	.84	-	.01
170 NE first crosscut 3/14/56, 15 ft. wide	.08	1.05	0.20	-
170 NE shear zone muck 6/6/56	.02	.68	-	-
170Sw muck samples				
Minus ½" 5/10/56	.04	.86	.03	.27
General muck 6/6.56	.02	1.18	-	.02
" " 6/12/56	.16	.32	-	.03
8" quartz vein 6/25/56	.14	.32	-	.41
Minus ½" 6/18/56	.10	.48	-	.08
General muck 7/6/56	.041	.76	-	.065

Although the foregoing assays were all made by the Bruce Williams Laboratories, I have some reason to believe that the general picture is not quite so poor as the foregoing figures would indicate but there is no indication that the work done under the contract resulted in the discovery of a workable ore body. All muck from the 170 SW heading was saved separately as "ore" for several weeks. A fairly careful sample of this portion of the dump and certain other samples are being sent to other assayers but the gold values of the material are probably too low to ~~xxxxxxxxxxx~~ permit the ore to be handled commercially even if the tungsten content averages considerably higher than any figures so far obtained.

Our work on the 100 level has resulted in hoisting about 300 tons of fairly good looking tungsten ore but this work is not covered by the contract.

The 500 ft. horizontal drill hole from the station on the 170 SW drift was completed on October 5. The average core recovery, based upon the driller's figures, was 96% which of course looks pretty good. However, there were numerous sections where the core recovery was conspicuously low. My inspection of the core indicates that the country rock was greenstone all the way although there were many variations in texture and in degree of epidotization which Mr. Bergman's logging may contribute something in the way of geologic information. Several bands of tuff or porphyritic structure were noted and I noted different types of silicification including occasional small masses of opalescent blue quartz ~~which I suspected might have been corundum~~. Carbonates were observed in varying degree but never abundant. I noted scattered sulphides at 40 - 42 ft and small specks elsewhere but no sulphide mineralization of any real importance.

As I have always hoped to find confirmation of the presence of the ~~xxxx~~ extension of the main Phoenix vein into this territory I call attention to marked alteration and silicification at 90-95 ft. where this vein should appear. Core recovery from 89 to 94 ft. was only 65% and from 94 to 101 ft. 90%. A poorly developed quartz vein, which I take to be the Nash vein as reported in the Bureaus drill hole BM3 , was cut at around 360 feet and I noted that the angle of the quartz-greenstone ~~contact was about 45~~

contact was about 45° which may indicate either that the vein has flattened out as compared with the intercept in nearby DH 3 or that the our drill hole had turned upward. I had expected to intersect the vein at about this point but I understand that Mr. Bergman's maps indicated that it might be fartherxoff. I observed a quartz veinlet at about 410 ft. and silicification and a few specks of pyrite at 423 ft. but no real indications of veins other than the two which I have noted.

Inasmuch as our surface work had indicated the presence of a second vein in the hanging wall of the vein which we followed on the 170 SW I had the driller put another hole for 30 ft. in the opposite direction from the 500 ft. hole. Here again, however, we failed to find ore.

Although the two additional holes, totalling 55 feet, were not specifically authorized under the contract, it was my judgment that they were justified and I am including the footage in the present statement.

It may be regretted that neither of the two main targets proposed in our original contract were reached by drifting. The fact is that we are not financially able to continue the southwest drift on the basis of the contract rate of $37.50 as the cost with no other work to share the irreducible auxiliary services figures out to at leastx $45 at our recent rate of irregular advance. I would have been only too glad to continue with both drifts but we were ordered to stop work in the North east drift.

In pursuance of this contract, we have spent almost $40,000 of which we have reported to date a total of only $14,235 as directly chargeable under the terms of the agreement. Our principal expense was in rehabilitating the shaft and widening and taking up bottom in the 170 level before we could start drifting but even with two headings operating we were occasionally paying considerably more than 25% of the current cost of exploration.

Although we have not attained the targets established in the original contract and have not exhausted the possibilities of finding ore on the Furniss property, I am of the opinion that the Phoenix property affords much more promising opportunities for finding important tungsten as well as other values. In my original application, I requested an allotment of funds for explorations in the Phoenix Mine when and if it was reopened but this allocation was not included in the contract. I now respectfully request that the unexpended funds under the contract be reserved for explorations in and near the same vein system but from 1500 to 3000 feet to the Southwest where both surface and underground indications are in my opinion much more promising.

Carolina Tungsten Mining Company

Paul M. Tyler

Paul M. Tyler, Partner

Carolina Tungsten Mining Company
CONCORD, NORTH CAROLINA
5005 Edgemoor Lane
Bethesda 14, Md.

P. O. BOX 866
GRAND CENTRAL STATION
NEW YORK, 17, N. Y.

P. O. BOX 1251
CONCORD, N. C.

RECEIVED
NOV 5 1956
D.M.E.A.

October 27, 1956

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

Re: DMEA - 3742(tungsten)
Idm - E869
Furniss-Phoenix Mines
Cabarrus County, N.C.

Dear Bob:

I must correct a stupid mistake in the Narrative Section(c) of the August monthly report of the Carolina Tungsten Mining Company which I repeated with additions in the second paragraph of the corresponding Section of the September 1956 report.

The reportable advance in the Northeast drift for the purpose of our contract was actually 154 feet instead of 116 or 117 feet as indicated by the text.

This correction does not affect our voucher covering the total work under the contract which includes 276 feet of drifting of which 154 feet was in the Northeast end and 122 feet was in the Southwest end of the 170 level.

When I was writing the narrative section of the report I referred to some rough notes based upon a temporary survey point which I had located properly on my maps but which I carelessly assumed as being an intermediate station which was actually located at a turn 37 feet further back.

Excluding the first crosscut in which we discovered a new vein, the actual amount of drifting we did in the Northeast drift totalled 175 feet instead of 154 feet as indicated in our voucher. The lost footage is due to our zig-zag course through the fault zone before I aimed the drift at our original target and to the southeasterly crosscut in which we followed a narrow barite vein before we intercepted the quartz vein which we picked up almost simultaneously in the heading. When we straightened the drift in order to lay track most of the zig-zag pattern was lost and since a straight line is the shortest distance between two points we must lose credit for some of the work done.

Four carbon copies of this letter are enclosed herewith. Would it be possible to have them distributed so that one copy of this correction is attached to each copy of my original Monthly Report for September 1956? And please pardon my carelessness.

Sincerely yours,

Paul M. Tyler

Paul M. Tyler, Partner

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

RECEIVED
OCT 29 1956

October 26, 1956

Mr. Jay L. Chambers, Chief
Contract Administration and Audit Division
DMEA
Washington 25, D. C.

Re: DMEA-3742, Idm-E869(Tungsten)
Carolina Tungsten Mining Co.
Furniss & Phoenix Mines
Cabarrus County, N.C.

Dear Mr. Chambers:

Upon receipt of your letter of October 23, we are approving the September voucher and forwarding it to the Finance Office for payment of $1,933.13

We have received a letter from Paul M. Tyler, stating that his October voucher will claim the costs of assaying samples, and will be accompanied by his final geologic and engineering report. Because the costs of assaying will approximate $200, we decided not to withhold that amount from the September voucher.

We will advise you further, when we receive the October voucher.

Sincerely yours,

Robert A. Laurence

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

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

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

Re: Docket No. DMEA-3742 (Tungsten)
Carolina Tungsten Mining Co.
Phoenix and Furnace Mines
Cabarrus County, North Carolina
Contract No. Idm-2869

Dear Mr. Laurence:

By memorandum dated October 17, 1956, you forwarded to the DMEA Operating Committee the enclosed copy of the referenced Operator's September, 1956, MF-104 and attachments with the request for a review and audit prior to your approval for payment.

An audit review of this project has disclosed that the total costs of $14,235.00 claimed by the Operator are subject to adjustments of (1) a disallowance of $385.00 for 55 feet of diamond drilling in excess of the contractual maximum and (2) an additional allowance of $112.50 for 3 feet of drifting performed but not claimed by the Operator. Therefore, the total acceptable costs amount to $13,962.50 with $10,471.87 being the Government's proper 75 percent participation.

Inasmuch as the Operator heretofore has been paid an aggregate of $8,538.74, there remains a balance of $1,933.13 payable on the September, 1956, MF-104. In approving this voucher for payment it is suggested, however, that a minimum of $200.00 be withheld to assure the remittion by the Operator of the final report required by Art. 6 (c) of the contract.

The issuance of a Report of Review in lieu of a final audit is being withheld pending determination that the September, 1956, MF-104 is in fact the final voucher and that the contract will not be amended to authorize additional work.

Sincerely yours,

(Signed) J. L. Chambers

Jay L. Chambers, Chief
Contract Administration
and Audit Division

Enclosure

Copy to: Docket
Admr. Reading File
Mr. Chambers
Helen Miller
Mr. Martin
Mr. Talbert

EDTalbert/wb
October 22, 1956

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D.C.
ROOM 1-0-2 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

RECEIVED
OCT 19 1956

October 17, 1956

Mr. Paul M. Tyler
Carolina Tungsten Mining Co
5005 Edgemoor Lane
Bethesda, Maryland

Re: DMEA-3742, Idm-E869
(Tungsten)
Furniss & Phoenix Mines
Cabarrus County, N.C.

Dear Paul:

Your September voucher has been received, and as this may be the final voucher, we have sent it to the Washington office for audit before we can approve payment. It is possible that Mr. Chambers, or others of our Contract Administration and Audit Division will contact you directly, if they encounter any problems.

It is regrettable that more favorable results did not show up in the core drilling; the results combined with the drifting certainly indicate that no further work is justified at the Furniss. Referring to the fourth paragraph of the last page of your narrative, I do not agree that the main targets were not reached. I have always thought that cross-cutting exploration is the main objective; drifting on thin veins is too expensive and by doing 276 feet of drifting we have more than adequately explored the strike extensions of the main Furniss vein.

We will be glad to consider your suggestion that some work be done at the Phoenix before the contract is considered complete. Please submit your proposal for that work, and if it is approved, an amendment will be prepared to authorize the additional work.

We are unable to authorize the excess of 55 feet of core drilling, as the contract provided only 500 feet. After the long hole failed to intersect any veins, additional drilling at the Furniss is hard to justify.

You did not include costs of any assays on your voucher, although your narrative indicates that 19 samples were assayed. Is this to be reported on a subsequent voucher?

I would suggest that you submit your final engineering and geologic report on the work at the Furniss mine (article 6c of the contract) now, in order to avoid delay in approval of your September voucher. If an amendment is approved to authorize work at the Phoenix, a supplementary final report may be submitted after completion of that work.

Sincerely yours,

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

RAL/sm
cc
Opr. Com.-3
Chambers
Lynch
Shirley
Files

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM 1 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

WASHINGTON OFFICE

RECEIVED
OCT 19 1956

October 17, 1956

Memorandum

To: Operating Committee, DMEA - Washington

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

Subject: DMEA-3742, Idm-E869(tungsten) Carolina Tungsten Mining Co. Furniss & Phoenix Mines, Cabarrus County, North Carolina

Enclosed is one copy of the September, and possibly final voucher on the subject exploration contract. We are submitting it for review and audit, before approving for payment. As this is a short-form, unit cost contract, there are no invoices or other documentation. The Operator's records can probably be consulted at the office of Mr. Paul M. Tyler, 5005 Edgemoor Lane, Bethesda 14, Maryland.

Our records indicate that 279 feet of drifting has been done, although the Operator claimed 276 feet. He has not claimed anything for assays, although the contract authorized them. We do not recommend approval of the 55 feet of excessive core-drill footage which is claimed.

Drifting has been suspended, in keeping with instructions from this office. Results to date indicate that further drifting cannot be justified. However, as the Operator indicates that he will request an amendment providing for work at the nearby Phoenix mine, we are withholding a recommendation for termination until that proposal is received and studied. The work to date will not support a recommendation for certification.

We have not yet received a final report on the Furniss exploration, although the Operator has submitted good monthly narrative reports. It is my understanding that the pumps have been removed, so that no additional information will be available, and I have suggested that the Operator submit his report on the Furniss work now.

Upon receipt of the audit and review, we will then forward this voucher to the Finance Office.

RAL/sm
Chambers
Lynch
Shirley
Files

Robert A. Laurence

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

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

PAID ON VOUCHER & SCHEDULE
PAYMENTS No. 20

OPERATOR'S MONTHLY REPORT AND VOUCHER

RECEIVED
SEP 24 1956

Month of August 1956 Docket No. DMEA 3742 Contract No. Idm-E869
Operator's Name Carolina Tungsten Mining Co. Minerals Tungsten
Address P.O. Box 1251, Concord, N.C.
Contract Amount, $26,400.00 Government Participation: 75 % Amount, $19,800.00

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 Contracts: Short Form						
Drilling 180 ft. @ $7.00	$1,260.00	—	$1,260.00			
Bulldozing						
Crosscutting						
Drifting 34 ft. @ $37.50	$1,275.00	$8,850.00	$10,125.00			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$2,535.00	$8,850.00	$11,385.00	2,535.00	8,850.00	11,385.00

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

Date Sept. 10, 1956 *Payee Carolina Tungsten Mining Co.

Per Paul M. Tyler Title 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:

$ 1901.25

Signature Helen R. Miller
(Authorized Certifying Officer)

Date SEP 21 1956 Vou. No. 46
(See other side)

633.75

(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. Tam-E869 in accordance with the terms of the contract.

Signature W. M. Beck Title Mining Engineer USBM Date SEP 20 1956

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lawrence Title EXECUTIVE OFFICER DMEA REGION V Date SEP 20 1956

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.

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED
SEP 24 1956

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of August 1956 Docket No. DMEA 3742 Contract No. Idm-E869
Operator's Name Carolina Tungsten Mining Co.
Address P.O. Box 1251, Concord, N.C
Minerals Tungsten

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting	Ft.	$1275.00	34	$10,125.00	270	$37.50	600	$37.50
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core	Ft.	$1260.00	180	$1260.00	180	$7.00	500	$7.00
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Total Distributed Costs		$2,535.00	–	$11,385.00				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		$2,535.00		$11,385.00				

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

Date 10 Sept. '56 Operator Carolina Tungsten Mg. Co.
Per Earl M. Tyler Title Partner

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)

Remarks:

(For Government use only)

W. T. Beck Mining Engineer
USBM
SEP 20 1956

INSTRUCTIONS

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

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

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

GPO 872894

RECEIVED
SEP 24 1956

(c) Narrative Report -- August 1956: DMEA 3742 Idm-R869

Carolina Tungsten Mining Co., P. O. Box 1851, Concord, N. C.

In compliance with directions from Mr. Robert A. Laurence, Executive Officer, DMEA Field Team, Region V, in a letter dated July 31, the Northeast drift aimed at the vein encountered in Bureau of Mines d. d. hole BM 4 was terminated early in August. Instead of proceeding 300 feet as contemplated in the Contract, it being stopped at 117 feet, more or less.

After being in country rock for several weeks, the northeast drift encountered a vein with the last round before it was stopped. A couple of shots in the SE wall at heading shows this vein to comprise only about two inches of quartz containing a little pyrite but no visible scheelite. About 3 feet back of the face, this vein is nearly 6 inches wide but still rather barren quartz. The strike is about N 55 E and the dip is steeply to the northwest. Presumably the same vein was also cut in a crosscut that I started by mail in an effort to find the vein after being directed to stop the heading and before I saw the face after the last blast. This crosscut follows the barite vein on the boundary of the fault zone and was first mentioned in the June report. Although much wider at this intersection, the "new" vein still does not look like ore. On the presumption that it may be the final pinching out of the stringer that we followed before getting lost in the shear zone, I now plan to core drill from this location in the hope of finding the much stronger vein that I found in our first crosscut mentioned in the report for February-March. According to the map, however, it is quite possibly the beginning of the vein intercepted in BM 4, 5, and 5A.

The Southwest drift has been extended to a total distance of 116 feet from the starting point under the contract. Over the last 40 feet, the quartz component has pinched and swelled but remained mostly devoid of either scheelite or pyrite. There has been a virtually continuous streak of scheelite about 1/16th inch wide along the footwall of the quartz and much less persistent streak following the hanging wall of the quartz. Numerous cross fractures on the hanging wall side often show scheelite for 10 to 14 inches into the country rock but the parallel veinlets which showed scheelite farther back are now barren.

As noted in earlier reports, some 300 tons of muck from the southwest drift were saved for ore but the results of several assays and other tests were disappointing. The vein in the back(roof) of the drift is now being sampled at 20 ft. intervals.

The grade of ore in the stope on the 100 seems to be holding up well. A few fist-size lumps of scheelite have been found.

Amendment No. 2 to our contract, dated August 15, in addition to extending the time limit from August 31 to December 31, authorized us to drill a 500 ft. horizontal hole, southeasterly from the southwest drift of the 170 level. After we cut a 14 ft. station, the Pennsylvania Drilling Co. driller, Mr. Doyle, arrived on Wednesday morning, August 22. The direction of the hole, as established by Mr. Bergman with a Brunton compass, is S 25 E, which would intercept the Nash vein at about the same point as the Bureau's barren hole BM3. As of this date I have paid for 180 ft. of core. Inasmuch as Mr. Bergman had

expected to meet me at the mine last Thursday to log the core, I did not inspect more than about the last 40 ft. However, I was told that no signs of a quartz vein or other economic mineralization have yet been encountered although it was my hope that we might find an extension of the main Phoenix vein at a distance of about 100 feet. I understand that the entire distance to date has been in greenstone of types commonly found in the vicinity. Since the core is badly broken and heavy flows of water have been encountered, I assume that we may be in another shear zone or faulted area. The fragments of core I examined show fractures in all directions, bothe parallel to and across the direction of the hole. Older fractures have been more or less tightly recemented but many of the fracture planes are heavily coated with iron oxides and often show carbonates when tested with acid although no carbonate veinlets were observed. A new core barrel has been sent to the mine and it is hoped that it will improve core recoverywhich I estimated roughly as only 80%. Very few pieces over an inch or two long have been recovered. Beginning last week, the sludge is being caughtin a powder box beneath the collar of the hole.

Carolina Tungsten Mining Company

Paul M. Tyler

Paul M. Tyler, Partner

Form [illegible]4 (Rev.) [illegible]52)

Budget Bureau No. 42-R1036.5

RECEIVED AUG 1[illegible] 1956 PAID ON VOUCHER & SCHEDULE [illegible] 19 VIENNA K-

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

Month of July, 1956 Docket No. DMEA 3742 Contract No. Idm-E869

Operator's Name Carolina Tungsten Mining Co. Minerals Tungsten

Address P.O. Box 1251, Concord, N.C.

Contract Amount, $ 26,400.00 Government Participation: 75 % Amount, $ 19,800.00

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 45 ft @ $37.50	$1,687.50	$7,162.50	$8,850.00			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$1,687.50	$7,162.50	$8,850.00	1687.50	7162.50	8850.00

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

Date Aug. 8, 1956 *Payee Carolina Tungsten Mining Co.

Per Paul M. Tyler Title 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:

$ 1265.62

Signature Peter R. Miller
(Authorized Certifying Officer)

Date AUG 13 1956 Vou. No. 28
(See other side)

421.88

(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. E869 in accordance with the terms of the contract.

Signature S. C. Bergman Title Geologist, USGS Date 8/10/56

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Fairman Title EXECUTIVE OFFICER DMEA REGION V Date AUG 10 1956

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.

(c) Narrative Report -- July 1956 : DMEA 3742 Idn-E869

Carolina Tungsten Mining Co., P. O. Box 1251, Concord, N. C.

Progress under the Contract was delayed by a breakdown of the hoist engine. A steam hoist was installed and operated temporarily by compressed air but proved unsuitable. A new gasoline engine was purchased but was not fitted to the old hoist until August 4th.

The Northeast Drift was continued on a bearing of N 60 E for an additional 25 feet. Numerous light-colored carbonate seams were encountered and occasional small masses of barite but no scheelite and little or no sulfides. Some change in the rock was noted but may be merely a differentiation of the greenstone with no economic significance. It is believed that the vein discovered in the crosscut still lies 20 to 30 feet east of this heading which is being stopped. A new crosscut is being started to follow the barite vein mentioned in our June Report.

The Southwest Drift was extended 20 feet to a total distance of 85 feet from the original heading. The vein turned slightly so that the strike is S 60 W. After the final round for the month the quartz vein had narrowed and the scheelite showings in the quartz and in the hanging wall stringers deteriorated so that the muck was not saved for ore. If no improvement is observed in August the low grade ore shoot, about 60 feet long, will be carefully sampled and an experimental stope started to determine whether it would pay to mine.

During the period after the hoist broke down several men were put to work in the so-called Barite Pit on the Copper Vein and some work was done on the scheelite showing near the Chas. Dry residence. This work was largely unproductive and the excavations were covered up as a result of a series of heavy rains. Assays of samples taken at these and other points along the Copper Vein failed to show encouraging gold values.

A proposed Amendment No. 2 to our Contract was prepared by DMEA in response to our application for authorization to drill a single 1,000 ft. hole instead of four short holes as contemplated in the original contract. However, recent advice from drilling contractors indicated that the specified price of only $7.00 per foot would result in the Operator paying at least 50% of the cost. As we could not afford to assume this additional expense at this time the proposed agreement was returned unsigned

Negotiations have been started with two drilling contractors with a view to obtaining bids for one or more shorter holes but prices for diamond core drilling have increased 20 to 30 % during the last year and holes longer than about 150 feet may require a heavier machine which uses more air than we can supply with our present equipment.

A small stope has been started on the 100 level.

Carolina Tungsten Mining Co.

Paul M. Tyler

Paul M. Tyler, Partner

E-104A
(1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

RECEIVED
AUG 1 7 1956

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of July 1956 Docket No. DMEA 3742 Contract No. Idm-E869

Operator's Name Carolina Tungsten Mining Co. Minerals Tungsten

Address P.O. Box 1251, Concord, N.C.

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting	Ft.	$1687.50	45	$8,850.00	236	$37.50	600	$37.50
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		$1,687.50	45	$8,850.00				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		$1,687.50		$8,850.00				

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

Date August 8, 1956 Operator Carolina Tungsten Mining Co.

Per Earl M. Tyler Title Partner

REMARKS:

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

(Instructions on reverse)

(For Government use only)

S.C. Bergman - Geologist, USGS
8/10/56

INSTRUCTIONS

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

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

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

GPO 872894

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM 1 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

RECEIVED
OCT 29 1956

October 26, 1956

Mr. Paul M. Tyler
Carolina Tungsten Mining Co.
5004 Edgemoor Lane
Bethesda 14, Maryland

Re: DMEA-3742, Idn-3869(Tungsten)
Furnise & Phoenix Mines
Cabarrus County, N. C.

Dear Paul:

Your September voucher is being forwarded for payment of $1,933.13. This figure is derived as follows:

Disallowance,	55 ft. drilling @ $7.00	$385.00
Allowance,	3 ft. drifting @ $37.50	112.50
	Net disallowance.....	273.50

Amount claimed on your voucher	$2,850.00
Disallowance, as shown above	273.50
Approved total	$2,577.50
75% of approved total	1,933.13
Approved for payment.....	1,933.13

The above figures have been approved by an audit review by our washington staff.

Although you actually did 279 feet of drifting under the contract, you claimed only 276 feet. That accounts for the additional three feet, as shown above.

Please correct the totals on your records, so that the next one will show the following "totals previously reported:"

Drilling	$ 3500.00
Drifting	10462.50
Total	13962.50

Sincerely yours,

Robert A. Laurance
EXECUTIVE OFFICER
DMEA REGION V

RAL/sm.
cc:
Opr. Com.-2
Finance Office
Lynch
Mine
Chambers

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

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of June, 1956 Docket No. DMEA 3742 Contract No. Idm-E869
Operator's Name Carolina Tungsten Mining Co. Minerals Tungsten
Address Box 1251, Concord, N. C.
Contract Amount, $26,400.00 Government Participation: 75 % Amount, $19,800.00

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~~ 52 ft. x $37.50	$1950.00	$5212.50	$7162.50			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS				1950.00	5212.50	7162.50

I certify that the above bill is correct and just and that payment therefor has not been received.
Date July 10, 1956 *Payee Carolina Tungsten Mining Co.
Per Hal Larkey Title 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:
$ 1462.50
Signature Helen R. Miller (Authorized Certifying Officer)
Date JUL 18 1956 Vou. No.
(See other side)

487.50

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-869 in accordance with the terms of the contract.

Signature S. C. Bergman Title Geologist USGS Date 7/16/56

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature V. J. Lynch Title ACTING EXECUTIVE OFFICER DMEA REGION Date JUL 16 1956

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.

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED
JUL 20 1956

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of June 1956 Docket No. DMEA 3742 Contract No. Idm-E869
Operator's Name Carolina Tungsten Mining Co. Minerals Tungsten
Address P.O. Box 1251, Concord, N. C.

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting	Ft.	$1950.00	52	$7162.50	191	$37.50	600	$37.50
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		$1950.00	52	$7162.50				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		$1950.00		$7162.50				

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 10, 1956 Operator Carolina Tungsten Mining Co.
Per [signature] Title Partner

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

REMARKS:

(Instructions on reverse)

(For Government use only)

S. C. Bergman, Geologist, USGS
7/16/56

INSTRUCTIONS

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

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

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

GPO 872894

DMEA Contract No. Idm-8869-Tungsten

(c) Narrative Report for June 1956

The Northeast Drift on the 170 level of the Furniss Mine was curved progressively to the East in the fault zone carrying numerous veinlets of carbonates but no sulphides or scheelite. It finally encountered a strong vein of barite accompanied by minor amounts of carbonates but still devoid of economic mine realization. This vein varied in width up to about 8 inches and apparently lies along the NE boundary of the fault zone which strikes about S 50 E with a dip of 70 degrees to 80 degrees to the SW. It was followed for some 10 feet but as this resulted in reversing the general direction of the drift, the course of the drift was turned again in a northeasterly direction. It was intended to proceed from this point on a bearing of N 65 E in order to intercept the vein at the location of Bureau of Mines drill hole BM4. At the end of the month, however, the drift was running about N 58 E tending to follow the joints or bedding planes of the greenstone. As a result of these several changes in direction the footage advanced toward the aforementioned target was only 17 feet. A total of 3 or 4 days' work was consumed without making any measurable progress for the purpose of the contract. Consideration is being given to following this barite vein as the shortest distance to the vein encountered in the crosscut as described in earlier monthly reports but any work in this direction should be chargeable to a crosscut rather than to advance straightenings in order to lay new track.

Throughout the month, the Southwest Drift on the 170 level was being driven in low-grade tungsten ore. The scheelite content, as indicated by a lamp, continued to improve and on July 5th, the face of the heading showed a strong quartz vein, 10 to 16 inches wide, carrying considerable scheelite, and numerous parallel veinlets closely spaced in the hanging wall. At least 4 of these narrow veinlets carried persistent streaks of scheelite. The current width of the vein is about 4 feet. The strike still averages about S 53 W and the dip around 60 degrees to 70 degrees NW. All material from this heading has been saved as "ore" although, due to the geometry of the vein across the drift and also to the fact that the rich fines are largely left on the floor to ballast the track, the muck hoisted has been quite low grade. Three samples of the "ore pile" showed a range of 0.10 to 0.20 oz gold. Earlier samples were even lower grade except for one freak assay of minus ¼ inch fines which showed 0.27% WO3 but only 0.04 oz. gold. A sample of vein quartz, about 8 inches wide and excluding the richer streaks that characteristically follow along the edges of the quartz portion of the vein, assayed 0.14 oz. gold, 0.32 oz. silver, and 0.41% WO3.

The drift on the 100 level was continued so as to develop a total of 42 feet of tungsten-bearing vein up to 2 feet wide. This length corresponds roughly to the Bulines sampling on the floor of the slope above as reported in R.I. 4724. Since this vein strikes S 62 W with a dip of 60 degrees to 65 degrees NW, there is a question whether it is the same vein that we are following on the 170 level. It may be in the hanging wall. However, a limited amount of bulldozing has failed to yield clear evidence of more than one strong vein in this vicinity on the surface.

We checked the level of the water in the Phoenix Shaft on July 6, about 192 days after pumping was stopped last December. The water has risen to about 25 feet above the 250 level. A rough estimate of the volume of open workings indicates a inflow of about 1.5 million gallons or an average of only about 8,000 gallons per day. A previous examination, on February 25 before the spring rains, indicated an average inflow of less than 4,000 gallons per day.

Three bull dozer trenches were dug along the assumed strike of the main Phoenix vein southwest of the Furr shaft. Scheelite-bearing quartz was encountered in one trench about halfway between the Phoenix and the Furnise shafts but the vein became less and less distinct within 2 or 3 feet of the surface.

On June 12, 1954, a bull dozer cut on the Copper vein at the foot of the hill about 750 feet NE of the Copper Shaft uncovered a barite-rich zone containing encouraging amounts of the coarse scheelite and pyrite. The vein widened from only a few inches to 10 feet or more, the best portion seemingly being under a very large tree. We propose to sink a test pit to explore this occurrence within a few weeks.

Three or four days' work on the scheelite showing near the C. Dry residence afforded no new information but work will be resumed when convenient.

Several bull dozer trenches were dug on the hill SW of the Copper Shaft. The first trench, about 75 feet from the main shaft, disclosed the vein in place near the surface but the quartz portion pinched out within about 3 feet. Some distance beyond, the vein is exposed on the same strike (S 60 W) in a shallow shaft which shows about 30 inches of quartz with traces of scheelite in place. About 40 feet beyond this shallow shaft the vein was found to be only 18 inches wide and a strong branching quartz lens striking almost due N and S played out within 30 inches below the surface. Two additional trenches about 50 and 100 feet, respectively, further SW showed only traces of the vein which appears to fade out into a belt of light colored rock that somewhat resembles granite in the weathered outcrop. This condition has been noted in several places on the Phoenix-Furnise vein system and again on the extension of the so-called Pete Rank vein further to the NW.

The entire area for several hundred yards west of the Copper Shaft is strewn with numerous quartz fragments some of which may have originated in sulphide-bearing veins. A dike-like mass of quartz about 30 inches wide and 10 feet long seemed to line up with a concentration of quartz boulders striking N 05 W. However, this "dike" proved to be only 2 feet thick and when turned over by the bull dozer no signs of a vein could be seen. It may be surmised that this large area is underlain by a shear zone with numerous cross veins but no real evidence of tungsten or other economic mineralization has been noted at surface. A single shallow trench on the Tucker vein indicated that

it contained only small leases of quartz over the surface at that point and little or no ore.

Harold Lockey Burton

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

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K-

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of May, 1956 Docket No. DMEA 3742 RECEIVED Contract No. Idm. E869

Operator's Name Carolina Tungsten Mining Co. Minerals Tungsten

Address P.O. Box 1251, Concord, N.C. JUN 18 1956

Contract Amount, $26,400.00 Government Participation: 75 % Amount, $ 19,800.00

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 73 ft @ $37.50	$ 2,537.50	2,325.00	$ 5,212.50			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	2,887.50	2,325.00	5,212.50	2887.50	2325.00	5212.50

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

Date June 1, 1956 *Payee Carolina Tungsten Mining Co

Per Paul Mulyler Title 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:

$ 2165.63

Signature Helen R. Miller
(Authorized Certifying Officer)

Date JUN 15 1956 Vou. No. 2648
(See other side)

3

731.87

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-869 in accordance with the terms of the contract.

Signature A. L. Peyton Title Mining Engineer Date 6-13-56

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lawrence Title EXECUTIVE OFFICER DMEA REGION V Date JUN 13 1956

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.

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

RECEIVED
JUN 18 1956

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of May 1956 Docket No. DMEA 3742 Contract No. Idm. E869

Operator's Name Carolina Tungsten Mining Co Minerals Tungsten

Address P.O. Box 1251, Concord, N.C.

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	foot	$2887.50	77	$5,212.50	139	$37.50	600	$37.50
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		2887.50		5,212.50				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		2887.50		5,212.50				

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

Date June 1, 1956 Operator Carolina Tungsten Mining Co.

Per Paul M. Tyler Title Partner

REMARKS:

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

(Instructions on reverse)

(For Government use only)

Cl. L. Peyton
U.S. Bureau of Mines

INSTRUCTIONS

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

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

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

GPO 872894

DMEA 3742 - Idm - E869

Carolina Tungsten Mining C., Cabarrus County, N.C.

RECEIVED

JUN 18 1956

(c) Narrative Report--May 1956

After taking up bottom for as much as 5 ft. and widening for about 100 feet drilling was begun under the contract on the Southwest heading of the 170 level of the Furniss Mine during the first week of May 1956. The vein improved rapidly and within about 10 ft. widened to over 30 inches with two good streaks of scheelite and considerable sulphides. After about 15 ft. the ore shoot deteriorated but within another 10 feet it improved again. A sample was taken of the muck on May 23 when the heading was in the poorer part of what may prove to be a fairly good ore shoot. The drift was extended a total of 39 ft. on the same general strike, S 53° W

Considerable experimentation was done on rock taken from bottom of the SW drift on footwall of the vein. The almost quartz-free rock contained perhaps 5% sulphides and occasional specks of scheelite but assays were disappointing. After screening out all material over ½-in. a bulk sample assayed 0.04 gold, 0.86 silver, 0.03% copper, and 0.27% WO_3. However, a test in a Denver mechanical pan indicated that the WO_3 content did not average over 0.06% and the gold values were only about $2 a ton.

After following the narrow stringer in the Northeast drift for a total of about 75 feet(from our starting point), it veered to the east and disappeared in a fault zone containing numerous cross fractures filled with carbonates. The drift was turned to follow the stringer and is now being continued almost due east with the view of picking up the strong quartz vein which we cut in the crosscut. After passing through the fault zone the heading encountered dark massive greenstone with much disseminated pyrite and similar in appearance to the rock in the hanging wall of the new quartz vein found in crosscut. It is anticipated that this vein will be intercepted within 20 or 30 feet and can be followed to the target ore shoot formerly worked in the vicinity of BuMines drill hole BM 4.

Bulldozing(not covered by contract) was done on the other known vein sytem in the vicinity of the Charles Dry residence. A small nest of scheelite crystals was found beneath an outcrop investigated by the BuMines. It is now proposed to sink a prospect pit at this point. A 24-inch quartz vein striking S 70° E has been exposed for as much as 100 ft. but is seemingly cut off at both ends. This vein may follow a tension fracture similar to those observed underground crossing the Phoenix-Furniss vein system.

Application is being made for an amendment to our contract to permit drilling one long hole to explore the territory between the two main known vein systems. Bulldozing and other surface work indicates the existence of numerous small veins or fractures which strike in various directions. It is believed that other veins more or less parallel to the Phoenix-Furniss and Copper-Tucker vein systems may be found but the main object is to investigate the possibility of larger ore bodies such as may be associated with the cross fractures and tension cracks and where the ore-bearing solutions were not confined to the narrow tight fissures like those existing in the Phoenix and Furniss Mines. Inasmuch as there is marked similarity between this structure and that found in the Mamme mine Vance County, it is hoped that the highly successful geologic techniques developed there may be applicable here.

6/1/56

Paul M. Tyler

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

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

PAID ON VOUCHER & SCHEDULE OF PAYMENTS

RECEIVED MAY 16 1956

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of April, 1956 Docket No. DMEA 3742 Contract No. Ton-[illegible]869

Operator's Name Carolina Tungsten Mining Co. Minerals Tungsten

Address Box 1251, Concord, N. C.

Contract Amount, $26,400.00 Government Participation 75 % Amount; $19,800.00

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 25[illegible] @ 37.50	937.50	1387.50	2325.00			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS				937.50	1387.50	2325.00

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

Date May 7, 1956 *Payee Carolina Tungsten Mining Co.

Per Joe Parker Title 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:

$ 703.12

Signature Helen R. Miller
(Authorized Certifying Officer)

Date MAY 15 1956 Vou. No. [illegible]

(See other side)

23[illegible].28

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

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

Signature C. L. Peyton Title Mining Engineer Date MAY 14 1956

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature V. J. Lynch Title ACTING EXECUTIVE OFFICER DMEA REGION V Date MAY 14 1956

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.

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED
MAY 16 1956

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of April 195 Docket No. DMEA 372 Contract No. [illegible]
Operator's Name Carolina Tungsten Mining Company Minerals Tungsten
Address Box 1251, Concord, N. C.

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting	Ft.	$37.50	25	$2325.00	62	$37.50	600	$37.50
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		$37.50	25	$2325.00				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		$37.50	25	$2325.00				

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

Date May 7, 1956 Operator Carolina Tungsten Mining Co.
Per Joe Lackey Title Partner

REMARKS:

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

(Instructions on reverse)

(For Government use only)

A. L. Peyton
U. S. Bureau of Mines

INSTRUCTIONS

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

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

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

GPO 872894

RECEIVED
MAY 1 6 1956

Monthly Report for April 1956

Section (a) Narrative

Re: DMA - 3742, Idea-[illegible] (Tungsten), Paradise- Phoenix Mines
Cabarrus County, N. C.

Drifting on the Northeast 170 ft. level was continued during the month of April. Although only 25 feet of advance was accomplished in this heading which is reimbursable under the contract other work in connection with this drifting was accomplished.

Over 75 ft. of bottom was taken up in the Southwest drift on the 170 ft. level together with necessary widening in an effort to begin advancing at the heading on this end of the drift as contemplated by the contract.

Also, the Southwest drift on the 1[illegible] ft level was advanced approximately 15 ft. although it likewise is not reimbursable under the Contract.

During this month a new jackleg drill was purchased and put into use. It was found to be more easily handled and moved around as is necessary by the type of our operation.

Some sampling work was done on the ore from the 170 ft. level but the results are not available as of this date.

Respectfully submitted,

Carolina Tungsten Mining Company

Hal Ladley, Partner

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

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

PAID ON VOUCHER & SCHEDULE OF PAYMENTS

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of Feb.-March, 1956 Docket No. DMEA 3742 Contract No. Idm-E869

Operator's Name Carolina Tungsten Mining Co. Minerals Tungsten

Address P.O. Box 1251, Concord, N.C.

Contract Amount, $ 26,400.00 Government Participation: 75 % Amount, $ 19,800.00

RECEIVED APR 18 1956

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 37 ft. @ $37.50	$1,387.50	none	$1,387.50			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS				1387.50	–	1387.50

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

Date Apr. 17, 1956 *Payee Carolina Tungsten Mining Co

Per Hal Parker Title 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:

$ 1040.62

Signature Helen R. Miller (Authorized Certifying Officer)

Date APR 17 1956 Vou. No.

(See other side)

346,88

(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. E869 in accordance with the terms of the contract.

Signature S. C. Bergman Title Geologist - USGS Date 4/16/56

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lawrence Title EXECUTIVE OFFICER DMEA REGION V Date APR 16 1956

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.

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED
APR 18 1956

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of Feb- March 1956 Docket No. DMEA 3742 Contract No. Idm- E 869

Operator's Name Carolina Tungsten Mining Co Minerals Tungsten

Address P.O. Box 1251, Concord, N.C

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting	Ft.	$1,387.50	37	$1,387.50	37	$37.50	600	$37.50
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		$1,387.50		$1,387.50				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		$1,387.50		$1,387.50				

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 April 17, 1956 Operator Carolina Tungsten Mining Co.

Per Hal Lackey Title Partner

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

REMARKS:

(Instructions on reverse)

(For Government use only)

S.C. Bergman, Geologist USGS 4/16/56

INSTRUCTIONS

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

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

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

GPO 872894

PAUL M. TYLER

CAROLINA TUNGSTEN MINING COMPANY

Monthly Report for February-March 1956

RECEIVED
APR 18 1956

Section (c) Narrative

Re: DMEA-3742, Idm-E869(Tungsten), Furniss-Phoenix Mines
Cabarrus County, N. C.

Initial work under this Contract, during February-March 1956, totalled 37 feet of advance of the Northeast Heading of the 170-ft. level.

As thereby exposed, the present vein is still variable in width and narrow with meager and spotty scheelite showings which are not deemed worthy of sampling. The current strike is approximately N 52 E but the sinuous course from the main crosscut continues to average about N 43 E(magnetic)

After expenditures of some $10,000 for unwatering and rehabilitation of the shaft, access to the 170-ft. level of the Furniss Mine was accomplished late in January but a large amount of mucking, widening of the drifts, and taking up bottom had to be done before track could be laid to either heading. However, work was begun on the Northeast heading under the Contract on or about February 7th and has continued intermittently thereafter. Although several dozen holes have been shot and hundreds of tons of muck removed from the Southwest drift, the track on that end of the level was still over 100 feet from the heading on March 31.

Meanwhile, to check the Contractor's belief that the main vein is still in the footwall, a crosscut was started at a point where good tungsten showings were found as indicated in the map of the Furniss workings in U. S. Bureau of Mines Rept. of Investigations 4724(Sample location #8), about 54 ft. from center line of the main crosscut from the shaft. An 8 - 12 inch quartz vein with massive chalcopyrite was encountered about 9 ft. SE of the vein in the drift. In the opinion of the DMEA Field Team(Messrs. Beck and Bergmann), this is an entirely new vein. The crosscut was continued for a total advance of 22 ft. without encountering another quartz vein or a definite footwall. A channel sample representing the first 15 ft. below the vein of the driftand including the "new"vein, assayed 0.08 oz/T gold, 1.05 oz/T silver, and 0.20% copper. The work in this crosscut, although contributing to geologic information, is not reimbursable under the Contract.

The Southwest drift on the 100-ft level of the Furniss Mine was also re-opened, cleaned out, and heavily timbered. Drilling and blasting began on March 26. Two rounds had been shot when this level was inspected by the DMEA Field Team on March 30. This work, likewise, is not reimbursable under the Contract.

Respectfully submitted,

Carolina Tungsten Mining Co.,

Paul M. Tyler

Paul M. Tyler, Partner

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

OCT 11 1957

Carolina Tungsten Mining Company
5005 Edgemoor Lane
Bethesda 14, Maryland

Re: Docket No. DMEA 3742 - Tungsten
Phoenix and Furniss mines
Cabarrus County, North Carolina
Contract No. Ids-c869

Gentlemen:

This is with reference to the subject exploration contract between you and the Government.

It is not our intention to issue a certification of discovery or development which would create a lien against the subject property. We are, therefore, closing our books and records with respect to this project. Your attention is called, however, to the provisions of the contract which require the operator to keep and preserve certain records for the period indicated.

We regret that the exploration work performed did not result in a discovery or development. Your participation in the exploration program, however, is sincerely appreciated.

As requested in your application the following exhibits, which were attached to the application, are returned herewith:

1. Report of Investigations 4724, Bureau of Mines. Investigation of Furniss Tungsten Deposits in Cabarrus County, North Carolina. 1 printed copy.

2. Tungsten Deposits in Cabarrus County, North Carolina, by Robert S. Houston. A thesis submitted to the College of Agriculture and Engineering of the University of North Carolina, 1950. 1 bound typed copy.

Sincerely yours,

C. O. Mittendorf

Administrator

SPHOLT:foc 10-4-57
cc to: Code 400
800
Admr. R. File
~~Sparx Room~~
FT. REG. V

Enclosures

R. W. Holliday, USBM
T. H. Kiilsgaard, USGS

Audit copy

TERMINATION AGREEMENT

It is agreed this 4th day of September, 1957, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Carolina Tungsten Mining Company, a partnership, hereinafter called the "Operator," parties to that certain Exploration Project Contract No. Idm-E869,(Docket No. DMEA-3742), dated September 12, 1955, hereinafter called the "Contract," that:

1. Effective November 9, 1956, the Contract and all obligations of the parties thereunder, except as otherwise herein expressly provided, shall be and are hereby terminated.

2. The Government shall contribute only to the fixed unit costs of work performed prior to said effective date. Any work or operations prosecuted or costs incurred by the Operator beginning with said effective date, except as otherwise provided in this termination agreement, shall be for the sole account of the Operator without contribution by the Government.

3. The Operator shall promptly perform all winding-up and settlement actions provided for in the Contract, including the rendering of the final report and final account.

4. All rights of the Government provided for in the Contract with respect to a certification of discovery or development, percentage royalty and liens for its payment, records, audits and recovery of any overpayment, are preserved.

5. The Operator hereby releases and agrees to save the Government harmless from all claims or demands under or arising out of said Contract, except as otherwise provided for in this termination agreement.

IN WITNESS WHEREOF, these parties have executed this agreement as of the day and year first above written.

THE UNITED STATES OF AMERICA

Carolina Tungsten Mining Co.

By C. O. Mittenzwey
Administrator, Defense Minerals Exploration Administration

By Hal Lockey

Title Partner

RECEIVED SEP 25 1957 E.A.

OFFICIAL FILE COPY
DMEA
RECEIVED SEP 25 1957

DATE	INITIALS	CODE

CAROLINA TUNGSTEN MINING COMPANY
DOCKET NO. DMEA 3742
CONTRACT NO. IDM-5769

JUSTIFICATION FOR TERMINATION AGREEMENT

A proposed termination agreement, forwarded to the Field Team on May 6, 1957, for signature by the Operator, if satisfactory to the Field Team and the Operator, contained a "pseudo-certification" clause, inserted because it was considered possible that if there were production from either the Furniss or Phoenix mines (the two areas covered by the contract), such ore, even though not discovered as the result of work done under the contract, might be produced or extracted through DMEA workings.

That proposed termination agreement was returned unsigned by the Operator on May 20, 1957, with a letter stating the Operator's reasons for not signing, chiefly objection to the "pseudo" clause, with the consequent lien on possible future production from the properties.

Comprehensive review of all data available in this office indicates that, although showings on surface gave promise that deposits of tungsten ore might be found by exploration in the quarter-mile interval between the Phoenix and Furniss shafts, neither the small amount of tungsten ore discovered in the 122 feet of new drift driven southwesterly on the 170-foot level of the Furniss mine, nor the tungsten showings disclosed in the 157 feet of new drifting northeasterly on the same level of the Furniss mine, considered with the negative results obtained in drilling the 500-foot diamond drill hole southeasterly from the southeast drift on Furniss 170-foot level, are sufficient to justify any insistence on inclusion of a "pseudo-certification" clause.

In view of the above, and because the probability of mining sufficient tungsten ore from the property during the 10 year royalty repayment period is too small to justify policing a certification, a revised termination agreement with the "pseudo" clause has been prepared.

RECEIVED
AUG 20 1956

EXPLORATION PROJECT CONTRACT

CAROLINA TUNGSTEN MINING COMPANY, partnership

Docket No. DMEA-3742

AMENDMENT No.2

It is agreed this 15 day of August 1956, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Carolina Tungsten Mining Company, a partnership, comprised of Paul M Tyler and Hal Lackey, individuals, and Franconia Trading, Inc., hereinafter call the "Operators," parties to that certain Exploration Project Contract Idm-E869, Docket No. DMEA-3742, dated September 22, 1955, hereinafter called the "Contract," be further amended as follows:

1. In Exhibit "A", item 3 is changed to read as follows:

"From the southeasterly side of the southwest drift on the 170-foot level, drill 500 feet southeasterly, in a single hole if possible, approximately horizontal and approximately at right angles to vein or shear zone, to explore shear zone for parallel veins."

All provisions on page 2 of Exhibit "A" are unchanged.

2. Article 3 of the contract is further amended to read..."the Operator.....on or before December 31, 1956 shall complete the work" instead of "on or before August 31, 1956," as provided in Amendment No. 1

This amemdment shall not be constructed to increase the estimated total cost of the project, the aggregate total amount which the Government may be required to contribute, nor the agreed unit cost of any item of work.

CAROLINA TUNGSTEN MINING CO.

By: Paul M Tyler
(Partner)

By: Hal Lackey
(Partner)

By: Franconia Trading, Inc., (Partner)

BY: A B Rothwell President

THE UNITED STATES OF AMERICA

By: Robert A. Lamm
Executive Officer, DMEA
Field Team, Region V

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D.C.
ROOM 15 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

August 27, 1956

Memorandum

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

From: Field Team, DMEA, Region V, Knoxville, Tennessee

Subject: DMEA-3742, Idm-E 869 (Tungsten)
Carolina Tungsten Mining Company
Furniss and Phoenix Mines, Cabarrus County, North Carolina

Enclosed are the original and two copies of Amendment No. 2 to the subject contract. The usual distribution of the other copies has been made.

This amendment was necessary in order to consolidate all the cross-cut drilling into a single hole, in order to thoroughly explore possible parallel veins to the southeast. The additional time was needed, as the Operator had difficulty in sub-contracting the diamond drilling, and drilling did not get started until late in August.

Robert A. Laurence
Executive Officer

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

RECEIVED
AUG 23 1956

RAL/mg
Enclosures 3
cc - Oper.Comm. (2)
Lynch
Finance Office

GOVERNMENT COPY

EXPLORATION PROJECT CONTRACT

CAROLINA TUNGSTEN MINING COMPANY, a partnership

Docket No. DMEA-3742

AMENDMENT No. 1

It is agreed this 16th day of February 1956, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Carolina Tungsten Mining Company, a partnership, comprised of Paul M. Tyler and Hal Lackey, individuals, and Franconia Trading, Inc., hereinafter called the "Operators," parties to that certain Exploration Project Contract Idm-E869, Docket No. DMEA-3742, dated September 22, 1955, hereinafter called the "Contract," that:

1. ARTICLE 3, be amended to read....."The Operator on or before March 1, 1956 shall commence the work, and on or before August 31, 1956 (unless the Operators obligation to complete the work is terminated - see Article 8) shall complete the work."

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate total amount which the Government may be required to contribute, nor the agreed unit cost of any item of work.

CAROLINA TUNGSTEN MINING CO.

By Paul Tyler
Partner

By Hal Lackey
Partner

By Franconia Trading, Inc. (Partner)

By: [illegible] President.

THE UNITED STATES OF AMERICA

BY Robert A. Lawrence
Executive Officer, DMEA Field Team
Region V

DMEA Form 14

Contract No. Idm-E 869

Docket No. 3742

DEPARTMENT OF THE INTERIOR

Terminated contract

DEFENSE MINERALS EXPLORATION ADMINISTRATION

Obligation Document

TO: Chief, Finance Section, Budget and Finance Branch, Bureau of Mines

Please make the following entry on the records of the Defense Minerals Exploration Administration under the Strategic and Critical Minerals Exploration Program.

Date of Contract	Region	State	Commodity
September 12, 1955	V	North Carolina	Tungsten

Name and Address of Operator: Carolina Tungsten Mining Co.
5005 Edgemoor Lane
Bethesda 14, Maryland

	Reserve	Obligation
Prior Amount	0	19,800.00
Increase	0	0
Decrease	0	9,234.38
Revised Amount	0	10,565.62

Remarks:

ALLEN S. DAKAN
(Name)

Allen S. Dakan, Chief
Operations Control and
Statistics Division
(Title)

Date Delivered to Bureau of Mines, Washington 8/19/57

16418

Government's copy

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MF-200A
(Revised June 1954)

Docket No. DMEA-3742

Commodity Tungsten

Contract No. Idm-E 869

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
EXPLORATION PROJECT CONTRACT[1]
(Short Form)

It is agreed this SEP 1 2 1955 day of ....., 195..., between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and [2] Carolina Tungsten Mining Company, a partnership, comprised of Paul M. Tyler and Hal Lackey, individuals, and Franconia Trading, Inc.,
whose mailing address is 5005 Edgemoor Lane
Bethesda 14, Maryland,
hereinafter called the "Operator," as follows:

ARTICLE 1. *This contract* is entered into under the authority of the Defense Production Act of 1950, as amended. It consists of this form (MF-200A), the attached Exhibit "A," Annex I, and 2 maps, Figures 2 and 3-A

The Operator shall not transfer or assign this contract or any right thereunder without the written consent of the Government.

ARTICLE 2. *Operator's property rights.*—(a) The land which is the subject of this contract (hereinafter called "the land") is in the State of North Carolina, County of Cabarrus, and is described in Annex I.[3]

(b) The Operator represents and undertakes that:

(1) The Operator is the [4] See Annex I of [5] the mineral rights in the land, in possession and entitled to possession for all of the purposes of this contract, under and by virtue of a [6] See Annex I, [7] ..... recorded in Book -, page -, official records of said County; and

(2) The Operator's right, title, or interest (whether as owner, lessee, or otherwise) is subject only to the following claims, liens, or encumbrances: none.

(c) The Subordination Agreement of the holder of any claim, lien, or encumbrance listed above, and (if the Operator does not hold the legal title) the Consent to Lien of any holder of the legal title of the land (lessor, seller, optionor, etc.), are attached, as follows: Consents to Lien of lessors and sublessors

[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] Insert name, and if an organization, its nature (corporation and place of incorporation, partnership with names of partners, etc.).
[3] State on a separate sheet marked "Annex I" the legal description or enough to identify the property, particularly excluding any areas from which the production is not to be subject to the Government's percentage royalty.
[4] Insert "owner," "lessee," "contract purchaser," "locator," etc.
[5] Insert "the entire interest," "the mineral rights," "an undivided one-third," etc.
[6] Insert "deed," "lease," "contract," "location notice," "patent," etc.
[7] If not recorded, so indicate by inserting "un."

16—70616-1

(d) The Operator shall preserve and maintain his right, title, and interest in the land and his right to the possession thereof for the purposes of this contract, and shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of this contract. Until the lapse of the time within which the Government may make a certification of discovery or development without any such certification having been made, and after any such certification has been made, the Operator shall neither transfer, convey, nor surrender the land nor any right, title, or interest therein, nor permit nor suffer any claim, lien, or encumbrance thereon, without expressly referring to and providing in the instrument of conveyance, lien, or encumbrance for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof. If the Government makes no certification of discovery or development within the time limited in Article 7, it shall thereafter have no claim against the land or any production therefrom except for any production referred to in Article 7(b)(1).

ARTICLE 3. *The exploration project.*—The project is a search for indicated or undeveloped deposits of tungsten ore. The work to be performed is described in Exhibit "A." The Operator on or before December 30, 1955 shall commence the work, and on or before June 30, 1956 (unless the Operator's obligation to complete the work is terminated—see Article 8) shall complete the work.

ARTICLE 4. *Performance of the work.*—(a) *Operator's responsibility.*—The work shall be performed with reasonable diligence, efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for liability insurance covering employment; and with suitable and adequate equipment, facilities, materials, supplies, and labor, to bring it to completion within the time fixed.

(b) *Government may inspect.*—The Operator shall consult with and inform the Government on all phases of the work as it progresses. The Government may enter at all reasonable times to inspect the work under the contract, and also after a certification of discovery or development to inspect production operations and underground workings. The operator shall provide the Government with all reasonable means of access for such inspections.

ARTICLE 5. *Contribution by the Government.*—A fixed cost for each unit of work to be performed (per foot of drifting, per foot of drilling, per hour of operations, etc.) is hereby agreed upon, and is set forth in Exhibit "A" in connection with the estimated total cost of the project in the sum of $26,400.00 The Government will contribute 75 percent of the fixed unit costs as work is performed, in a total sum not in excess of $19,800.00: *Provided,* That until the Operator has rendered to the Government his final report, 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 10 percent of the estimated total cost of the work. The Government will make its contribution on the basis of the monthly vouchers referred to in Article 6(b), but all payments by the Government are provisional only, subject to audit, until the account between the Operator and the Government is finally audited and settled. To the extent that excesses over fixed unit costs or any excess over the estimated total cost may be necessary for the performance of the work, the Operator shall incur and pay such excesses for his own account without contribution by the Government. The Government may make payments directly to independent contractors and suppliers for the account of the Operator rather than to the Operator.

ARTICLE 6. *Reports, accounts, audits.*—(a) *Operator's records.*—The Operator shall keep suitable records and accounts of the units of work performed and of any production in which the Government may have an interest; and shall preserve those with respect to work performed for at least three years after final payment by the Government, and those with respect to production for at least three years after any obligation to pay royalties to the Government has terminated. The Government may inspect and audit said records and accounts at any time, either by itself or by a certified public accountant. The Comptroller General of the United States or his representative, until the expiration of said three-year periods, shall have access to and the right to examine any pertinent books, documents, papers, and records of the Operator. All of the Operator's vouchers and records and accounts relating thereto and the Government's payments thereof remain subject to adjustment until final audit by the Government.

(b) *Progress reports and vouchers.*—The Operator shall provide the Government with five copies of monthly progress reports in three sections as follows: (1) Operator's Monthly Report and Voucher showing a detailed statement of units of work performed during the reporting period; (2) Operator's Unit Cost and Progress Report showing the various types of work performed during the reporting period and the fixed unit costs incurred for each type of work; and (3) a Narrative Report of the work

performed during the reporting period including adequate engineering-geological maps or sketches, drill hole logs and locations, and assay reports on samples taken concurrently with advance in mineralized ground. (Forms for reporting under (1) and (2) above will be provided by the Government.)

(c) *Final report.*—Upon completion of the work or termination of the Government's obligation to contribute to costs, the Operator shall furnish the Government with five copies of a final report (in addition to the final progress report and voucher). This final report shall include a geological and engineering evaluation of the results of the work performed under the contract with an estimate of the ore reserves resulting from such work, complete assay data, adequate geological and engineering maps or sketches, and a summary of the work performed and the unit costs thereof.

(d) *Report of sales.*—The Operator shall provide the Government with suitable accounting and documentary evidence covering all production to which the Government's percentage royalty relates, such as copies of smelter or concentrator settlement sheets, and certified accounts of production and sale or other disposition of production.

(e) *Compliance with requirements.*—If in the opinion of the Government any of the Operator's reports, records, or accounts are insufficient or incomplete, or if the Operator fails to make them, the Government may procure the making or completion of such with suitable attachments as an expense of the work to which the Operator shall contribute. The Government may withhold approval and payment of any vouchers relating to insufficient or incomplete reports, records or accounts.

ARTICLE 7. *Repayment by Operator.*—(a) *Certification.*—If the Government considers that a discovery or development from which production may be made has resulted from the work, the Government, at any time not later than six months after a sufficient final report and final account (see Article 6) has been rendered, may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development.

(b) *Royalty on production.*—The Operator, as principal if the Operator is the producer, or as surety if the Operator is not the producer, shall pay to the Government a royalty on all minerals mined or produced from the land, as follows: (1) regardless of any certification of discovery or development, from the date of the contract until the lapse of the time within which the Government may make such certification, or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first; or (2) if the Government makes a certification of discovery or development, within a period of ten years from the date of the contract, or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first.

(c) *Basis for computation.*—The Government's royalty shall be a percentage of the gross proceeds (including any bonuses, premiums, allowances, or other benefits) from the production sold, in the form sold (ore, concentrates, metal, or equivalent), at the point of delivery (the f. o. b. point); *except,* that charges of *the buyer* arising in the regular course of business, and shown as deductions on the buyer's settlement sheets, on account of the cost of treatment processes performed by *the buyer,* sampling and assaying to determine the value of the production sold, and freight paid by *the buyer* to a carrier (not the Operator), shall be allowed as deductions in arriving at the "gross proceeds" as that term is used herein. Any costs of treatment processes, sampling or assaying, or transportation, performed or paid by the Operator or by anyone other than the buyer, are not deductible in arriving at the "gross proceeds" as that term is here used. The term "treatment processes," as here used, means those processes (such as milling, concentrating, smelting, refining, or equivalent) applied to the crude ore or other production after it is extracted from the ground, to put it into a commercially marketable form; excluding fabricating or manufacturing.

(d) *Unsold production.*—If any production (ore, concentrates, metal, or equivalent), after the lapse of six months from the date the ore was extracted from the ground, remains neither sold nor used by the Operator in integrated manufacturing or fabricating operations (for instance, if it is stockpiled), the Government, at its option, as long as it so remains, may require the computation and payment of its royalty on the value of such production in the form (ore, concentrates, metal, or equivalent) it is in when the Government elects to require computation and payment. If any production is used by the Operator in integrated manufacturing or fabricating operations before the Government makes its election, the Government's royalty on such production shall be computed on the value thereof in the form in which and at the time when it is so used. "Value" as here used means what is or would be gross income from mining operations for percentage depletion purposes in Federal income tax determination, or the market value, whichever is greater.

(e) *Percentages of royalty.*—The percentages of the Government's royalty shall be as follows:

One and one-half (1½) percent of amounts ("gross proceeds" or "value") not in excess of eight dollars ($8.00) per ton of production in the form in which sold, held, or used, plus one-half (½) percent for each additional full fifty cents ($0.50) by which such amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such amounts.

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

(f) *Time for computation and payment.*—The Government's royalty shall be computed and paid currently upon each lot sold, held, or used in integrated operations, as the case may be, as above provided in this article.

(g) *Lien for payment.*—To secure the payment of its percentage royalty, there is hereby granted to the Government a lien upon the land or the Operator's interest in the land and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

(h) *Notice to purchasers.*—The Operator shall give notice of the Government's claim for royalty to any purchaser of the production, and shall authorize and direct such purchaser to pay the royalty directly to the Government and to furnish the Government with copies of the settlement sheets. If the records of any production and sales or other disposition of production, whether the production is by the Operator or by others, are not made available to the Government, the amount of the royalty may be estimated by the Administrator, Defense Minerals Exploration Administration, or his successor, and his estimate thereof shall be final and binding upon the Operator.

(i) *No obligation to produce.*—Nothing in this contract is to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any production operations.

(j) *Government not obligated to buy.*—Nothing in this contract shall be construed as imposing any obligation on the Government to purchase any minerals mined or produced from the land.

ARTICLE 8. *Termination of the Government's obligations.*—(a) If in the opinion of the Government operations at any time have failed to achieve anticipated results that indicate the probability of making a worthwhile discovery, and in the opinion of the Government further operations are not justified, the Government may give the Operator written notice thereof, and thereupon the Government shall be free of all obligation to pay on account of units of work not then performed, and the Operator shall be free of all further obligation to prosecute the work other than such as may be necessary and incidental to winding up, reporting, and accounting.

(b) If in the opinion of the Government the Operator is in any manner in default under the terms of the contract, the Government may give the Operator written notice of such default with a specification of reasonable time within which the default must be cured; and if the Operator fails to cure such default as required, thereupon the Government shall be relieved of all obligation to pay on account of units of work not performed when the notice was given, and the Operator shall be free of all obligation to prosecute the work other than such as may be necessary and incidental to winding up, reporting, and accounting. The remedy provided for the Government in this paragraph "(b)" is in addition to any other remedy provided in this contract, and in addition to any other remedy the law may provide for breach of contract.

(c) The giving of any notice by the Government under the provisions of this Article 8 shall not affect the Government's rights as provided for in the contract with respect to a percentage royalty, and such rights shall be fully preserved.

ARTICLE 9. *Notices to be given by the Government* may be delivered to the Operator, or may be sent by registered mail addressed to the Operator at his mailing address stated in this contract. If mailed, notices are deemed to have been delivered five days after the date of mailing.

ARTICLE 10. *Officials not to benefit.*—No member of or delegate to Congress or resident commissioner shall be admitted to any share or part of this contract or to any benefit that may arise therefrom; but this provision shall not be construed to extend to this contract if made with a corporation for its general benefit.

ARTICLE 11. *Changes and added provisions.*—

Executed in sextuplicate the day and year first above written.

CAROLINA TUNGSTEN MINING COMPANY
(Operator)

By Paul Mylyler (Partner)

By [illegible] (Partner)

By Franconia Trading, Inc. (Partner)

By A B Rolt Lee President.

THE UNITED STATES OF AMERICA

By [illegible]
Administrator, Defense Minerals
Exploration Administration

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

Vera S. E. Rothwell

[CORPORATE SEAL]

U. S. GOVERNMENT PRINTING OFFICE 16—70618-1

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NOV - 3 1955

EXPLORATION PROJECT CONTRACT
CAROLINA TUNGSTEN MINING COMPANY
DOCKET NO. DMEA-3742

ANNEX I

The accompanying map (Fig. 3-A), shows location of Furniss and Phoenix mine properties under lease to the applicant by assignments from Russell and Company, Inc.

1. The Furniss property is described by metes and bounds as follows:

Tract #1

BEGINNING at large iron pipe, Mrs. Snyder and Phoenix mine corner and run N. 28 3/4° E., 91 poles, 16 links (1,512.06 ft.), to a large double cedar on east side of Public Road, thence with the Public Road as follows: S. 51½° E., 42 poles, 10 links (699.6 ft.), thence S. 75° E., 28 poles, 3 links (463.98 ft.), thence S. 64½° E., 6 poles (99.0 ft.), thence N. 72½° E., 20 poles, 4 links (332.6 ft.), thence N. 84 3/4° E., 24 poles, 7 links (400.62 ft.), S. 72° E., 24 poles, 7 links (400.62 ft.), thence S. 63½° E., 6 poles, 17 links (110.22 ft.), thence S. 72° E., 6 poles (99.0 ft.), to an iron stake in said Public Road, a new corner; thence three new lines as follows: First S. 31 3/4° W., 36 poles, 9 links (599.94 ft.), to a stake in the farm road, thence S. 11¼° W. 37 poles, 22 links (625.02 ft.), to a stake in the road, thence with said farm road S. 53½° W., 28 poles, 16 links (472.56 ft.), to a small hickory, an old corner of the Phoenix mine lands, thence with Phoenix mine lines, N. 54½° W., 71 poles, 6 links (1,175.46 ft.), to a large iron pipe on the east of the branch, thence S. 80½° W., 62 poles to iron pipe (1,023.0 ft.), thence N. 65° W., 23 poles, 9 links (385.44 ft.), to the beginning and containing approximately 74.5 acres.

Tract #2

BEGINNING at an iron stake by small hickory on south side of road (Mrs. W. A. Foiles corner) and runs thence to new line S. 11° W., 250 poles, 8 links (4,130.28 ft.), (a new corner of J. Coggins line), thence N. 34° W., 15 poles, 4 links,

(250.14 ft.), to a pile of stones, thence West 58 poles (957.0 ft.), to a pile of stones; the Phoenix mine corner, thence North 59 poles (973.5 ft.), to a large iron pipe, thence N. 11° W., 111 poles (1,831.5 ft.), to a small hickory, an old corner, thence N. 53½° E., 28 poles, 16 links (472.56 ft.), to a stake in farm road, thence N. 11¼° E., 37 poles, 22 links (625.02 ft.), thence N. 31 3/4° E. 36 poles, 9 links (599.54 ft.), to a stake, a new corner of Public Road, thence along said road as follows: S. 72° E. 12 poles, 5 links (201.3 ft.), S. 81° E., 18 poles, 5 links (300.3 ft.), S. 87½° E., 17 poles, 18 links (292.38 ft.), S. 56° E. 35 poles (577.5 ft.) to beginning and containing approximately 137 acres.

The Operator is the Assignee of a Lease-Option Agreement dated January 7, 1955, covering the Furniss property.

2. The Phoenix property is described by metes and bounds as follows:

BEGINNING at a common boundary post of the Furniss Mining property, an old Hickory Tree and running South 9½ degrees East, 1828 feet to an Iron Pipe; thence South 2 degrees West, 993 feet to a White Oak Tree; thence North 88 degrees West, 1614 feet to an Iron Pin; thence North 52 degrees, 45 minutes West, 993 feet to an Iron Pin; thence North 75½ degrees West, 297 feet to a Cedar Post; thence North 23½ degrees East, 842 feet to an Iron Pipe; thence North 83 degrees, 45 minutes West, 769 feet to a Red Oak Tree; thence North 15 degrees East, 1624 feet to an Oak Post, thence North 30¼ degrees East 328 feet to an Iron Pipe; thence South 65½ degrees East, 389 feet to an Iron Pipe; thence North 80 degrees East, 1032 feet to an Iron Pipe; thence South 51½ degrees East, 1169 feet to the point of beginning, comprising approximately 188 acres.

The Operator is the Assignee of a sublease dated January 7, 1955, covering the Phoenix property.

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NOV - 2 1955

EXPLORATION PROJECT CONTRACT
CAROLINA TUNGSTEN MINING COMPANY
DOCKET NO. DMEA-3742

EXHIBIT "A"

Description of the Work

Fig. 2, Plan map of workings of 170-foot level and surface of Furniss property, indicating proposed drifting and diamond drill holes, is attached hereto and made a part hereof.

1. From present face of northeast drift on the 170-foot level of the Furniss shaft, drift 300 feet northeasterly along the vein or shear zone. The drift shall be sampled in mineralized zones, and samples assayed for tungsten trioxide and gold.

2. From present face of southwest drift on the 170-foot level of the Furniss shaft, drift 300 feet southwesterly along the vein or shear zone. The drift shall be sampled in mineralized zones, and samples assayed for tungsten trioxide and gold.

3. From the approximate locations as indicated on Fig. 2, drill the following diamond drill holes:

D. D. Hole 1. From the northwesterly side of the Furniss shaft station on the 170-foot level, drill a hole northwesterly, approximately at right angles to vein or shear zone, and approximately 50 feet deep, to explore shear zone for parallel veins.

D. D. Hole 2. From the southeasterly side of proposed southeast drift on the 170-foot level of the Furniss shaft, drill a hole southeasterly, approximately at right angles to vein or shear zone, and approximately 125 feet deep, to explore shear zone for parallel veins.

D. D. Holes 3 and 4. From the southeasterly side of proposed northeast drift on the 170-foot level of the Furniss shaft, drill two holes southeasterly, approximately at right angles to vein or shear zone, each to be approximately 150 feet in depth and to

explore shear zone for parallel veins.

All diamond drill holes shall be minimum AX size and the total drilling not to exceed 500 feet.

All mineralized zones cut by diamond drill shall be sampled by splitting cores and samples assayed for tungsten trioxide and gold.

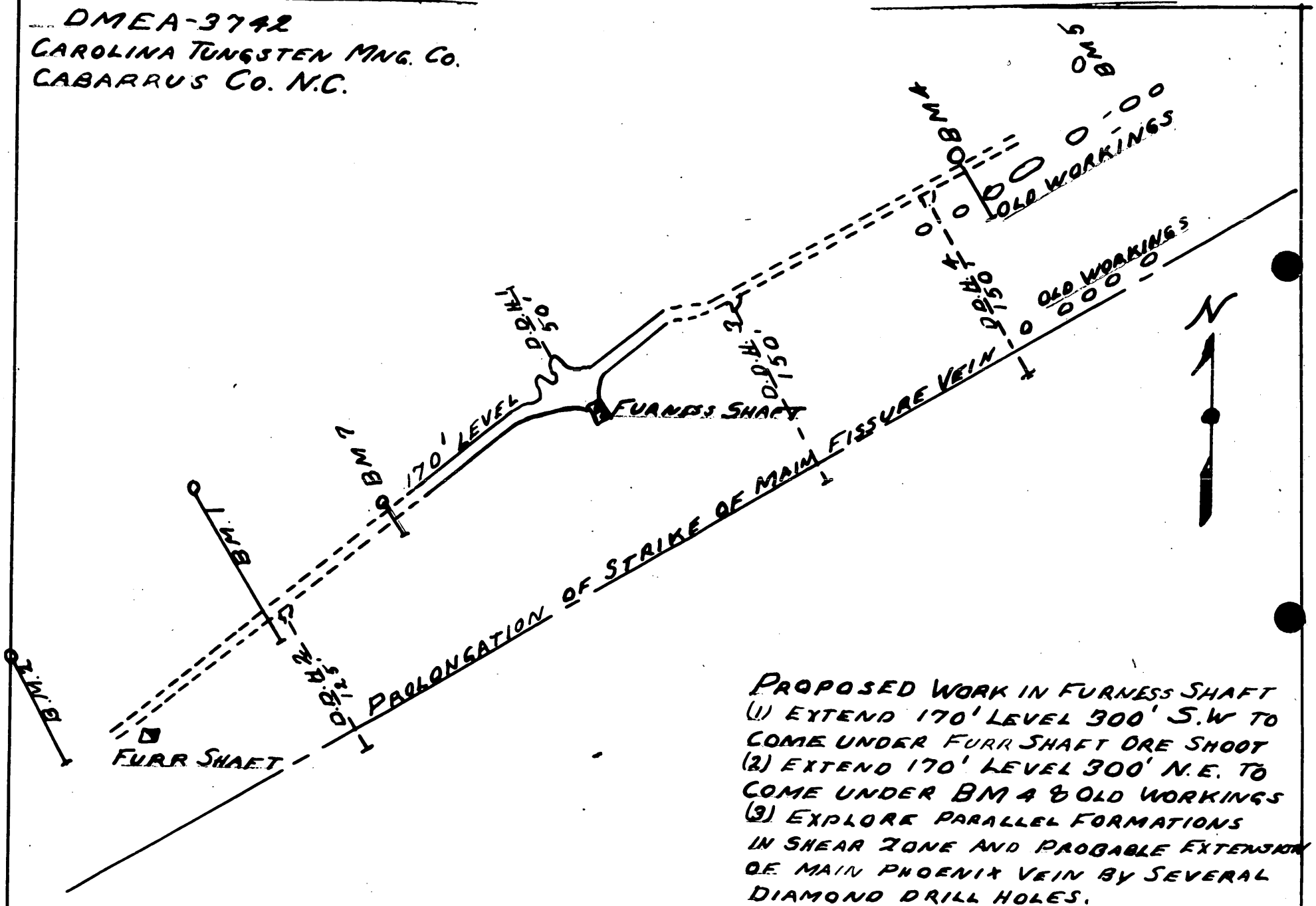
The drifts shall be timbered as necessary and shall be not less than 4 feet by 6½ feet in cross section in the clear.

Estimated Cost of the Work

Fixed Unit Costs

Drift 600 feet @ $37.50/ft.	$22,500.00	
Diamond drill 500 feet @ $7.00/ft.	3,500.00	
Sample and analyze for WO_3 and Au, 80 samples @ $5.00/each sample	400.00	
Estimated Total Cost of Project		$26,400.00
Government Participation @ 75%		$19,800.00

DMEA-3742
CAROLINA TUNGSTEN MNG. CO.
CABARRUS CO. N.C.

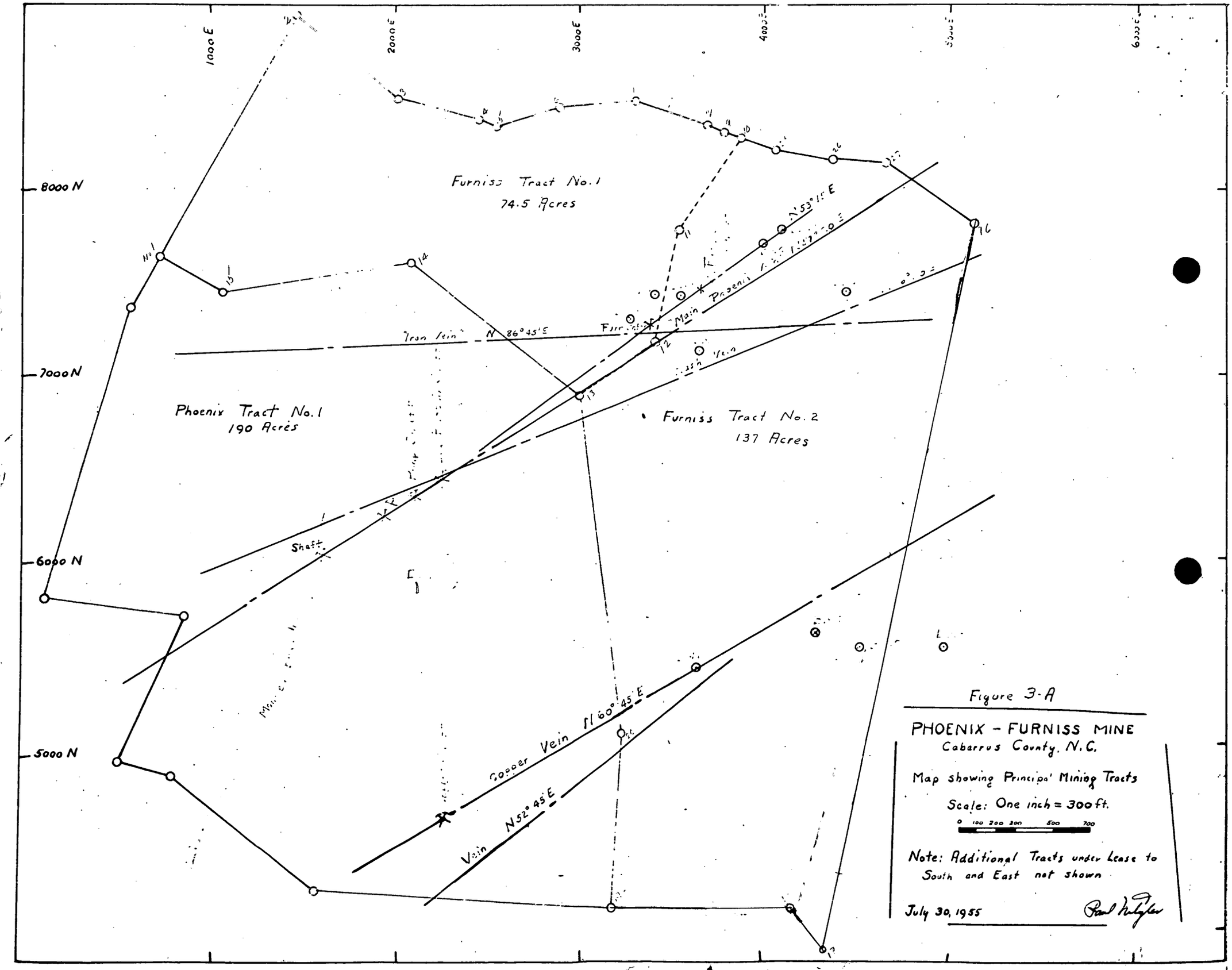


PROPOSED WORK IN FURNESS SHAFT
(1) EXTEND 170' LEVEL 300' S.W TO COME UNDER FURR SHAFT ORE SHOOT
(2) EXTEND 170' LEVEL 300' N.E. TO COME UNDER BM 4 & OLD WORKINGS
(3) EXPLORE PARALLEL FORMATIONS IN SHEAR ZONE AND PROBABLE EXTENSION OF MAIN PHOENIX VEIN BY SEVERAL DIAMOND DRILL HOLES.

PROPOSED DRIFTS
PROPOSED DIAMOND DRILL HOLES
BUREAU OF MINES D.D. HOLES

SCALE 1" = 100'

FIG. 2


1000 E
2000 E
3000 E
8000 N
7000 N
6000 N
5000 N
Furniss Tract No. 1
74.5 Acres
Phoenix Tract No. 1
190 Acres
Furniss Tract No. 2
137 Acres
Iron Vein
N 86° 45' E
Main Phoenix
N 53° 15' E
Shaft
Copper Vein
N 60° 45' E
Vein N 52° 45' E
Figure 3-A
PHOENIX - FURNISS MINE
Cabarrus County, N.C.
Map showing Principal Mining Tracts
Scale: One inch = 300 ft.
0 100 200 300 500 700
Note: Additional Tracts under Lease to South and East not shown
July 30, 1955

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MF-203
Revised March 24, 1955

For Government's Use Only
EXPLORATION PROJECT CONTRACT
Operator Carolina Tungsten Mining Co.
Docket No. DMEA- 3742
Contract No. Idm-E
Contract Date

CONSENT TO LIEN

To the United States of America:

Referring to that certain land in the County of Cabarrus, State of North Carolina, described as follows:1/

See Attachment 1 hereto, made a part hereof.

which is the subject of a proposed exploration project contract, hereinafter called the "contract," with the United States of America, hereinafter called the "Government;" in consideration of the contract and as an inducement to the Government to enter into it, the undersigned hereby--

1. Undertakes and agrees that property in which the Government may acquire an interest or equity under the contract may be dismantled, severed from the land, and removed, as may be provided in the contract; and the Government's interest and equity in such property shall be prior and superior to any adverse right or claim of the undersigned;

2. Grants to the Government a lien upon all of the undersigned's right, title, and interest in the land and upon any production of minerals therefrom to secure the payment to the Government of a percentage royalty on production as may be provided for by the contract;2/ and represents and undertakes that there are no claims, liens, or encumbrances upon the undersigned's right, title, or interest in the land prior to that hereby granted to the Government other than the following:3/

3. Undertakes and agrees neither to commit any act nor assert any claim in conflict with the provisions of this Consent to Lien; and to give advance notice of the Government's rights under this Consent to Lien to any subsequent transferee, mortgagee, encumbrancer, or lessee of any of the undersigned's right, title, or interest in the land; and

1/ Either (a) insert the legal description of the land, or (b) strike out the words "as follows" and insert "in a lease [or contract, deed, or other document] dated _____, and recorded in book _____ page _____ official records of said county." If (b) is used, the book and page of recordation cannot be dispensed with. If the space provided is insufficient, use an Annex, and refer to the Annex in the space.

2/ Mining or production from the land is not required, and in the absence of production there is no obligation to repay the Government.

3/ Write "none" if that is the case. Do not leave lines blank.

4. Consents to all amendments and assignments of the contract without notice thereof, and agrees that this Consent to Lien shall extend and apply thereto.

5. Added provision: _____

_____

_____

_____

_____

_____

_____

_____

Dated this 23 day of August, 195 5.

Robie L Nash [Seal]

Ethel A. Nash [Seal]

Archie L Nash [Seal]

I, Mary L Nash [Seal] certify that I am the _____ (Secretary, etc.) of the corporation named herein; that _____ who signed this agreement was then _____ (President or Vice-President, etc.) of said corporation; that said agreement was duly signed for and in behalf of said corporation by authority of its governing body, and was within the scope of its corporate powers.

_____

[Corporate Seal]

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ATTACHMENT 1

1. The Furniss property is described by metes and bounds as follows:

Tract #1

BEGINNING at large iron pipe, Mrs. Snyder and Phoenix mine corner and run N. 28 3/4° E., 91 poles, 16 links (1,512.06 ft.), to a large double cedar on east side of Public Road, thence with the Public Road as follows: S. 51½° E., 42 poles, 10 links (699.6 ft.), thence S. 75° E., 28 poles, 3 links (463.98 ft.), thence S. 64½° E., 6 poles (99.0 ft.), thence N. 72½° E., 20 poles, 4 links (332.6 ft.), thence N. 84 3/4° E., 24 poles, 7 links (400.62 ft.), S. 72° E., 24 poles, 7 links (400.62 ft.), thence S. 63½° E., 6 poles, 17 links (110.22 ft.), thence S. 72° E., 6 poles (99.0 ft.), to an iron stake in said Public Road, a new corner; thence three new lines as follows: First S. 31 3/4° W., 36 poles, 9 links (599.94 ft.), to a stake in the farm road, thence S. 11¼° W. 37 poles, 22 links (625.02 ft.), to a stake in the road, thence with said farm road S. 53½° W., 28 poles, 16 links (472.56 ft.), to a small hickory, an old corner of the Phoenix mine lands, thence with Phoenix mine lines, N. 54½° W., 71 poles, 6 links (1,175.46 ft.), to a large iron pipe on the east of the branch, thence S. 80½° W., 62 poles to iron pipe (1,023.0 ft.), thence N. 65° W., 23 poles, 9 links (385.44 ft.), to the beginning and containing approximately 74.5 acres.

Tract #2

BEGINNING at an iron stake by small hickory on south side of road (Mrs. W. A. Foiles corner) and runs thence to new line S. 11° W., 250 poles, 8 links (4,130.28 ft.), (a new corner of J. Coggins line), thence N. 34° W., 15 poles, 4 links, (250.14 ft.), to a pile of stones, thence West 58 poles (957.0 ft.), to a pile of stones; the Phoenix mine corner, thence North 59 poles (973.5 ft.), to a large iron pipe, thence N. 11° W., 111 poles (1,831.5 ft.), to a small hickory, an old corner, thence N. 53½° E., 28 poles, 16 links (472.56 ft.), to a stake in farm road, thence N. 11¼° E., 37 poles, 22 links (625.02 ft.), thence N. 31 3/4°

E. 36 poles, 9 links (599.54 ft.), to a stake, a new corner of Public Road, thence along said road as follows: S. 72° E. 12 poles, 5 links (201.3 ft.), S. 81° E., 18 poles, 5 links (300.3 ft.), S. 87½° E., 17 poles, 18 links (292.38 ft.), S. 56° E. 35 poles (577.5 ft.) to beginning and containing approximately 137 acres.

2. The Phoenix property is described by metes and bounds as follows:

BEGINNING at a common boundary post of the Furniss Mining property, an old Hickory Tree and running South 9½ degrees East, 1828 feet to an Iron Pipe; thence South 2 degrees West, 953 feet to a White Oak Tree; thence North 88 degrees West, 1614 feet to an Iron Pin; thence North 52 degrees, 45 minutes West, 993 feet to an Iron Pin; thence North 75½ degrees West, 297 feet to a Cedar Post; thence North 23½ degrees East, 842 feet to an Iron Pipe; thence North 83 degrees, 45 minutes West, 769 feet to a Red Oak Tree; thence North 15 degrees East, 1624 feet to an Oak Post, thence North 30¼ degrees East 328 feet to an Iron Pipe; thence South 65½ degrees East, 389 feet to an Iron Pipe; thence North 80 degrees East, 1032 feet to an Iron Pipe; thence South 51½ degrees East, 1169 feet to the point of beginning, comprising approximately 188 acres.

MF-203
Revised March 24, 1955

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NOV - 2 1955

For Government's Use Only
EXPLORATION PROJECT CONTRACT
Operator Carolina Tungsten Mining Co.
Docket No. DMEA-3742
Contract No. Idm-E
Contract Date

CONSENT TO LIEN

To the United States of America:

Referring to that certain land in the County of Cabarrus, State of North Carolina, described as follows:1/

See Attachment 1 hereto, made a part hereof

which is the subject of a proposed exploration project contract, hereinafter called the "contract," with the United States of America, hereinafter called the "Government;" in consideration of the contract and as an inducement to the Government to enter into it, the undersigned ~~xxxxxxx~~ surviving Trustees under the will of Charles A. Chapin, deceased, hereby--

1. Undertakes and agrees that property in which the Government may acquire an interest or equity under the contract may be dismantled, severed from the land, and removed, as may be provided in the contract; and the Government's interest and equity in such property shall be prior and superior to any adverse right or claim of the undersigned;

2. Grants to the Government a lien upon all of the undersigned's right, title, and interest in the land and upon any production of minerals therefrom to secure the payment to the Government of a percentage royalty on production as may be provided for by the contract;2/ and represents and undertakes that there are no claims, liens, or encumbrances upon the undersigned's right, title, or interest in the land prior to that hereby granted to the Government other than the following:3/

None.

3. Undertakes and agrees neither to commit any act nor assert any claim in conflict with the provisions of this Consent to Lien; and to give advance notice of the Government's rights under this Consent to Lien to any subsequent transferee, mortgagee, encumbrancer, or lessee of any of the undersigned's right, title, or interest in the land; and

1/ Either (a) insert the legal description of the land, or (b) strike out the words "as follows" and insert "in a lease [or contract, deed, or other document] dated _____, and recorded in book _____ page _____ official records of said county." If (b) is used, the book and page of recordation cannot be dispensed with. If the space provided is insufficient, use an Annex, and refer to the Annex in the space.

2/ Mining or production from the land is not required, and in the absence of production there is no obligation to repay the Government.

3/ Write "none" if that is the case. Do not leave lines blank.

4. Consents to all amendments and assignments of the contract without notice thereof, and agrees that this Consent to Lien shall extend and apply thereto.

5. Added provision: _____

_____

_____

_____

_____

_____

_____

_____

Dated this _____ day of _____, 195__.

Helen Evelyn Chapin Bishop [Seal]
Helen Evelyn Chapin Bishop, Trustee

Ruby Chapin Pitner [Seal]
Ruby Chapin Pitner, Trustee

Lowell M. Chapin [Seal]
Lowell M. Chapin, Trustee

I, _____ certify that I am the _____ _____ (Secretary, etc.) of the corporation named herein; that _____ _____ who signed this agreement was then _____ (President or Vice-President, etc.) of said corporation; that said agreement was duly signed for and in behalf of said corporation by authority of its governing body, and was within the scope of its corporate powers.

_____

[Corporate Seal]

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NOV - 9 1955

ATTACHMENT 1

The Phoenix property is described by metes and bounds as follows:

BEGINNING at a common boundary post of the Furniss Mining property, an old Hickory Tree and running South 9½ degrees East, 1828 feet to an Iron Pipe; thence South 2 degrees West, 993 feet to a White Oak tree; thence North 88 degrees West, 1614 feet to an Iron Pin; thence North 52 degrees, 45 minutes West, 993 feet to an Iron Pin; thence North 75½ degrees West, 297 feet to a Cedar Post; thence North 23½ degrees East, 842 feet to an Iron Pipe; thence North 83 degrees, 45 minutes West, 769 feet to a Red Oak Tree; thence North 15 degrees East, 1624 feet to an Oak Post, thence North 30¼ degrees East 328 feet to an Iron Pipe; thence South 65½ degrees East, 389 feet to an Iron Pipe; thence North 80 degrees East, 1032 feet to an Iron Pipe; thence South 51½ degrees East, 1169 feet to the point of beginning, comprising approximately 188 acres.

Docket No. 3742

Commodity Tungsten

DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

STRATEGIC AND CRITICAL MINERALS EXPLORATION PROGRAM

TO: Chief, Finance Section, Budget and Finance Branch, Bureau of Mines

Please enter on the records of the Defense Minerals Exploration Administration under the Strategic and Critical Minerals Exploration Program, the following contract, or amendment to contract.

Contract No. Idm-E 869

Date of Contract ~~amendment~~: September 12, 1955

Name and Address of Operator:

Carolina Tungsten Mining Company
5005 Edgemoor Lane
Bethesda 14, Maryland

Amount of Government participation _____ $19,800.00

Percent of Government participation 75 %

Region: V State: North Carolina

for J. L. Chambers, Chief
Contract Administration and
Audit Division

(Name)

(Title)

Date Delivered to Bureau of Mines, Washington.

54458

9/12/55