600

FILE COPY
SURNAME:

FE Johnson

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

Mr. J. E. Boyd
Vice President
Carolina Pyrophyllite Company
Capyco Division
Spruce Pine, North Carolina

Re: DMEA Docket No. 1796 (Topaz)
Carolina Pyrophyllite Company
Granville County, N. C.

Dear Mr. Boyd:

Reference is made to your application for exploration assistance for topaz, and to your letter of November 5, 1951.

The processing of your application has been held in abeyance pending the determination as to whether or not topaz would be placed on the list of strategic minerals for which Government aid in Exploration Projects would be furnished under Mineral Order 5. We have now been advised that because of the satisfactory supply situation for topaz, and substitute materials used in the National Defense Program, it is not contemplated that topaz will be placed on the list of minerals eligible for Exploration Projects.

Under the circumstances, we regret to advise that we are not in a position to furnish financial assistance for the exploration of your property. If this situation should change, however, we shall be glad to reconsider your application.

Sincerely yours,

2/5/52

C. O. Mittendorf (fw)

Acting Administrator
Defense Minerals Exploration
Administration

LGHouk/FEJohnson/gad/bih
2/4/52
cc to: Docket
Admr's. Reading File
Field Team, Region VII (2)
Messrs. J.J. Norton, Room G-228, GSA Bldg.
Dietrich - 3526 - Houk

FILE COPY
SURNAME:

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

Houk
Thayer
Hedges
Hutchison

Mr. J. E. Boyd
Vice President, Carolina
Pyrophyllite Company
Capyco Division
Spruce Pine, North Carolina

Subject: Docket No. DMEA-1796 - Topaz
Carolina Pyrophyllite Company
Granville County, North Carolina

Dear Mr. Boyd:

Reference is made to your application for exploration assistance for topaz and your letter of November 5, 1951.

Topaz has not been included in the list of strategic minerals to be placed on Mineral Order 5 as amended; therefore, your application does not qualify for exploration assistance and is herewith denied.

The Defense Minerals Exploration Administration wishes to thank you for making this application, and regrets that we cannot approve the expenditure of United States Government funds for exploration on your property.

Sincerely yours,

Acting Administrator
Defense Minerals Exploration
Administration

LGHouk:gad
1/30/52

Copy to: Admin. Reading File
Field Team, Region VII (2)
Mr. J. J. Norton, Rm. G-228, GSA Bldg.
Mr. Dietrich, 3526
Mr. Houk

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

January 30, 1952

Memorandum

To: Acting Administrator

From: Acting Chief, Non-Metallic Minerals Division

Subject: Topaz inclusion on MO-5

In telephone conversation of this date with Mr. Robert Waskey of DMPA, in reference to the above mentioned subject, Mr. Waskey stated they did not wish to have topaz placed on MO-5 at this time.

The development of the process to produce synthetic mullite from siliceous bauxite ores has progressed to the point where it is believed that eventually this Country may become independent of foreign kyanite sources.

Lawrence G. Houk

Lawrence G. Houk, Acting Chief
Non-Metallic Minerals Division
Defense Minerals Exploration
Administration

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

January 30, 1952

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To: Acting Administrator

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Lawrence G. Houk, Acting Chief
Non-Metallic Minerals Division
Defense Minerals Exploration
Administration

LGHouk:gad

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

January 30, 1952

Memorandum for the record

From: Acting Administrator

Subject: Reference is made to the memorandum of November ? , 1951, from Mr. Barr to Mr. Mittendorf, recommending that topaz be included in the list of minerals given exploration assistance under Mineral Order 5.

Recommendation to include topaz in MO-5 is rejected.

Acting Administrator
Defense Minerals Exploration
Administration

Non-Metallics Br.

DEFENSE MINERALS ADMINISTRATION WASHINGTON, D.C.

CAROLINA PYROPHYLLITE COMPANY

Nov 7 10 28 AM '51

J. E. BOYD,
VICE PRESIDENT

STALEY, NORTH CAROLINA

NEW YORK OFFICE
10 E. 40TH ST.

November 5, 1951

Please Reply:

Spruce Pine, N. C.

DEPARTMENT OF THE INTERIOR
RECEIVED
NOV 1 9 1951
Defense Minerals Administration,
Production Expansion Division.

Mr. James A. Barr, Sr., Chief
Industrial Minerals Division
Defense Minerals Administration
Washington 25, D. C.

Subject: DMA-~~1797X~~ 1796

Dear Mr. Barr:

Thank you for your letter of November 1st about our application for governemnt funds for exploration for topaz in Granville County, North Carolina. I note you have not received the Landlord's Subordination Agreement, Form MF-202. We are having some difficulty getting these; however, with your letter, it may be easier. I shall appreciate your sending me another supply of this Form MF-202.

At this time I cannot tell you what size of bulldozer we would use for trenching work on this property. The last we used was a large one with a 14' blade, capable of turning over quite sizeable boulders and pushing down relatively large trees.

The size we would use and location from which it would be brought will depend on tractors available at the time. Unless this is some urgency for providing a source of topaz for the Government stock pile, we question it would be advisable to start this prospecting until spring because of bad weather that may prevail during the winter months.

Yours very truly,

CAROLINA PYROPHYLLITE COMPANY

J E Boyd

Vice President

JEBoyd:fa

GUARANTEED CHEMI-TROLD PRODUCTS

FILE COPY
SURNAME:

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

NOV 1 1951

370

Barr

Mr. J. E. Boyd, Vice President
Carolina Pyrophyllite Company
Capyco Division
Spruce Pine, North Carolina

Subject: DMA-1797X

Dear Mr. Boyd:

Reference is made to your application DMA-1797X for Government funds for exploration for topaz in Granville County, North Carolina.

This office has recommended that topaz be included in MO-5, as amended, to receive Government aid in exploration.

We have not received the copies of the Landlord's Subordination Agreement (Form MF-202) with signatures. We are prepared to recommend your project for approval upon receipt of the Form MF-202.

What size bulldozer are you going to use for the trenching and from what distance is it to be hauled to the project?

Sincerely yours,

SIGNED

James A. Barr, Sr., Chief,
Industrial Minerals Division

LGHOUK:esf
11/1/51
cc: DMA Docket File
Mr. Barr

J7 11/1

370

AUG 17 1951

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

Room 13, Post Office Building
Knoxville 2, Tennessee

August 15, 1951

Mr. Robert Waskey
Defense Minerals Administration
United States Department of the Interior
Washington 25, D. C.

Dear Mr. Waskey:

Mr. John Boyd, Vice President, United Feldspar Corporation, Spruce Pine, North Carolina, was contacted on August 10 regarding DMA-1797-X of the Carolina Pyrophyllite Company's topaz exploration in Granville County, North Carolina. Mr. Boyd states that the landowners of the topaz deposit have expressed a reluctance towards signing the Landlord's Subordination Agreement, Form MF-202.

The landowners apparently feel that they should not subordinate their interest until they are assured that there will be topaz production from the deposit. This is poor reasoning, but is their view-point as expressed to Mr. Boyd.

Mr. Boyd believes that should DMA take favorable action upon the application and would write him to that effect, then he could use this to secure the landowners' signatures.

After talking with Boyd, I was left with the impression that the Carolina Pyrophyllite Company has made little effort to secure the signed MF-202. Also, it appears that the company is not especially interested in prospecting the topaz for the topaz alone, but more for any pyrophyllite which might be found. As stated in the transmittal letter by Mr. Boyd, dated June 28, 1951, the company will not obligate any by-product pyrophyllite which might result from topaz mining towards repayment of a loan for topaz exploration.

Sincerely,

Kefton H. Teague

Kefton H. Teague

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

Room 13, Post Office Building
Knoxville, Tennessee

August 3, 1951

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 6 1951

Memorandum

To: Tom Lyon, Chairman, Coordinating Committee, DMA

From: Executive Officer, DMA Field Team
Region VII

Subject: DMA-1796-X, Carolina Pyrophyllite Co.

Transmitted herewith are 4 copies of the field examination report on the above designated application.

The field examiners do not think core drilling is justified at this time and have recommended trenching instead. Geologic evidence is too meager to justify a tentative drilling program as stage B, but it is suggested that the company file again for core drilling, if the surface work indicates favorable conditions for it.

Robert A. Laurence
Robert A. Laurence
U. S. Geological Survey

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

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

DEFENSE MINERALS ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM, REGION VII

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 6 1951

DMA-1796-X, Carolina Pyrophyllite Company, Granville County, North Carolina

J. M. Parker III
W. G. Steel
U. S. Geological Survey

V. J. Lynch
U. S. Bureau of Mines

August 1, 1951

Carolina Pyrophyllite Company
Topaz Deposit, Granville County, North Carolina

DMA-1796-X

The occurrence of pyrophyllite on Bowlings Mountain, three miles northwest of Stem, Granville County, North Carolina, has been known for many years. Early prospecting for pyrophyllite in this area consisted of several short trenches and one shaft sunk to a depth of 60 feet.

In October 1950 the Carolina Pyrophyllite Company leased a tract of land, approximately 200 acres, on Bowlings Mountain. An extensive trenching program was started by the company in an effort to delineate minable deposits of pyrophyllite. The company is now producing a small tonnage of pyrophyllite and the crude ore is shipped to the company's plant at Staley, North Carolina, for processing. While this exploration work was being carried on, Mr. J. J. Hume, company superintendent, recognized the occurrence of topaz float in several areas on the southeastern slope of the mountain.

The topaz is associated with a pyrophyllite deposit being mined by Carolina Pyrophyllite Company of Staley, North Carolina. The deposits are in a north-northeast trending belt of meta-sedimentary and meta-volcanic rocks and lie about a mile west of a large biotite granite mass.

The topaz rock is difficult to recognize with assurance. Identification is based on analogy with topaz rock from the Brewer mine in South Carolina, and with material collected previously on Bowlings Mountain by others in which topaz was determined by chemical and optical means. Field criteria were principally superior hardness and weight as compared with associated siliceous rocks. The material which seemed to be highest grade topaz rock is light bluish gray, asphanitic, homogeneous, exceedingly hard, tough, and

heavy; surfaces exposed to weathering especially are smooth and porcelain-like. Such rock is almost undented and unpowdered when struck with a pick point. Blocks are commonly angular with plane surfaces and straight edges; many have roughly symmetrical shapes. Associated with such rock is a greater amount of dubious material which resembles it but is less hard and heavy, is slightly granular and brown on fresh breaks. This may be lower grade topaz rock or perhaps siliceous rock without topaz. Also present in smaller amounts at several places is spotted rock having grains up to 0.1 inch wide which resemble good topaz, embedded in fine-grained quartz.

No outcrops of topaz rock definitely in place were observed. Float topaz is very common over wide areas. Many prospecting trenches and pits have been opened in the vicinity but none expose topaz rock in place. Most of these openings, however, are not in the area of most concentrated float. Individual blocks of good topaz rock range up to about 18 inches thick. Siliceous rock containing fairly definite topaz occurs in loose blocks as much as six feet thick. Some of these boulders are so situated that they may be nearly if not exactly in place but most of the material is on moderate slopes and so is likely to have crept downhill considerably.

The distribution of float is very spotty. The areas of heavy float have much more in some places than in others. The concentrations of biggest blocks of surest topaz were in northerly trending areas five to six feet wide and 20 to 30 feet long but were not traceable from one area to another. A zone of such areas appears to extend north-northeast along the upper part of the east slope of Bowlings Mountain within 200 to 300 feet of its crest. Over most of the lower slopes the float is smaller, more rounded, and sparser,

and is believed to have come mainly from the higher zone.

Some of the larger blocks of siliceous rock show highly irregular vein-like masses of topaz that have weathered in high relief. The form and thickness of these topaz masses vary abruptly from one part to another. This small-scale irregularity coupled with the patchy distribution of float seem to indicate that the topaz bodies are relatively small and not definitely tabular or lenticular in form. They are believed to be on the order of two to four feet thick and 20 to 30 feet long at a maximum. They are pretty sure to be elongated to north-northeast and to have steep to vertical dips. Drastic and irregular pinching and swelling is to be expected. Probably a zone of topaz pods lies a little (100 to 200 feet) east of the pyrophyllite bodies and extends along the upper slope of the ridge a little east of its crest from a point at least 200 to 300 feet south of the shaft, north-northeastward to the new mine road across the north end of the mountain.

Geologic evidence available indicates that exploration should begin with bulldozer trenches across areas of heavy topaz float to establish the position of topaz rock in place. The first trenches should trend east-west across places where big blocks of apparently richest topaz rock are concentrated. Three such places near the ridge summit are indicated on the accompanying sketch map. The trenches should be at least 50 feet long and extend in both directions well beyond the float indications. If topaz rock in place is thus exposed, the length of the body should be determined by trenching along its strike. If minable bodies of topaz rock are discovered by the initial trenching across float concentrations, then longer east-west trenches down the east slope of the mountain might be justified in order

to determine the width across strike of the zone in which topaz lenses are present. Core drilling should wait until the surface extent of the topaz bodies is established.

Exhibit "A" DMA-1796-X

The Carolina Pyrophyllite Company
Staley, North Carolina

Location of Mine, Bowlings Mountain, Granville County, N. C.

It is proposed to excavate 1,000 feet of trenches to locate topaz deposits in place.

The work is to be done with a large sized bulldozer. The trenches will vary in depth depending on the thickness of overburden but probably will not exceed 10 feet.

The work will be done by the company with a rented bulldozer.

Locations of proposed trenches are shown on the attached map.

Eshibit "B" DMA-1796-X

The Carolina Pyrophyllite Company
Staley, North Carolina

No additional facilities, buildings or fixtures are to be purchased, installed or erected.

Exhibit "C" DMA-1796-X

The Carolina Pyrophyllite Company
Staley, North Carolina

Below is a list of operating equipment to be rented by the operator for use on the project:

1 large, heavy duty bulldozer with dozer operator. Rented price of dozer to include wages of dozer operator.

10 days at $16.00 per hour 80 hrs.	$1,280.00
Transporation of dozer to and from property	250.00
	$1,530.00

Exhibit "D" DMA-1796-X

The Carolina Pyrophyllite Company
Staley, North Carolina

Listed below is an itemized schedule of labor by numbers and classes and of supervisors by numbers and positions, with maximum wages and salaries that may be paid to each as an allowable cost of the project:

4 laborers - 10 days at $40. per week	$320.00
1 superintendent 1/2 time at $100. per week	100.00

The company superintendent can adequately supervise the work by spending 1/2 of his working hours on the exploration work.

Laborers are necessary for cleaning out the trenches after the bulldozer has completed its work.

Exhibit "E" DMA-1796-X

The Carolina Pyrophyllite Company
Staley, North Carolina

There are no existing facilities, buildings, installations or fixtures on the property which will be involved in this exploration work. No rehabilitation or repairs will be necessary.

THIS FORM MUST REMAIN IN THIS FILE JACKET AT ALL TIMES

SE DMA'S

CHECKED BY	FILED	DATE	INITIALS	TA-5459	FILE NO. 1696
Ismalo					
Cameron					
Ott					
Ford, Adair					
Olson					
Dorfman, F.					
Bourret					
Klein					
Gardner					
Ryan					
FIELD TEAM					
Gongalez					
Irvin					
Hornbeck					
Cory					
Ivon					
Macdonald					
Malone					
Smith					
Moon					
Schroder					
Taylor					
Orton					
Orcons					
Strobel					
Van Alstine					
Anderson					
Coffey					
Mills					
Weber	X	6-19-51	sgl		

REMARKS: NOTE: PER TELEPHONE CONVERSATION WITH MR. BARR AND MRS. DOROTHY ROSENBER ON 7-12-51 APPROXIMATELY 11:15, DMA-1696 does not belong to the DEFENSE MINERALS ADMINISTRATION. Miss Levine cleared this appln thru Mr. Strobel's, Records & Report Unit (Miss Lanahan) as of this date and was sent to Mrs. Rosenberg by STOP-RUNN MESSENGER.

NOTE: THE ABOVE NOTATION WAS IN ERROR ON THE PART OF NPA, AND WAS REFERRED AGAIN TO DMA, IMB:JAB on 7-27-51. NOW AS OF THIS DATE BEING PROCESSED BY MR. WEBER.

THIS FORM MUST REMAIN IN THIS FILE JACKET AT ALL TIMES

1796-X

	x	7-9-51	sgl	Fwd to Mr. Arundale thru Waskey as of this date.

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

DEFENSE MINERALS ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM, REGION VII

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 6 1951

DMA-1796-X, Carolina Pyrophyllite Company, Granville County, North Carolina

J. M. Parker III
W. G. Steel
U. S. Geological Survey

V. J. Lynch
U. S. Bureau of Mines

August 1, 1951

Carolina Pyrophyllite Company
Topaz Deposit, Granville County, North Carolina

DMA-1796-X

The occurrence of pyrophyllite on Bowlings Mountain, three miles northwest of Stem, Granville County, North Carolina, has been known for many years. Early prospecting for pyrophyllite in this area consisted of several short trenches and one shaft sunk to a depth of 60 feet.

In October 1950 the Carolina Pyrophyllite Company leased a tract of land, approximately 200 acres, on Bowlings Mountain. An extensive trenching program was started by the company in an effort to delineate minable deposits of pyrophyllite. The company is now producing a small tonnage of pyrophyllite and the crude ore is shipped to the company's plant at Staley, North Carolina, for processing. While this exploration work was being carried on, Mr. J. J. Hume, company superintendent, recognized the occurrence of topaz float in several areas on the southeastern slope of the mountain.

The topaz is associated with a pyrophyllite deposit being mined by Carolina Pyrophyllite Company of Staley, North Carolina. The deposits are in a north-northeast trending belt of meta-sedimentary and meta-volcanic rocks and lie about a mile west of a large biotite granite mass.

The topaz rock is difficult to recognize with assurance. Identification is based on analogy with topaz rock from the Brewer mine in South Carolina, and with material collected previously on Bowlings Mountain by others in which topaz was determined by chemical and optical means. Field criteria were principally superior hardness and weight as compared with associated siliceous rocks. The material which seemed to be highest grade topaz rock is light bluish gray, asphanitic, homogeneous, exceedingly hard, tough, and

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and is believed to have come mainly from the higher zone.

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Staley, North Carolina

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Staley, North Carolina

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DMA-1796-X

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Staley, North Carolina

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DMA-1796-X

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Staley, North Carolina

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DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 6 1951

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

DEFENSE MINERALS ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM, REGION VII

DMA-1796-X, Carolina Pyrophyllite Company, Granville County, North Carolina

J. M. Parker III
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U. S. Geological Survey

V. J. Lynch
U. S. Bureau of Mines

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and is believed to have come mainly from the higher zone.

Some of the larger blocks of siliceous rock show highly irregular vein-like masses of topaz that have weathered in high relief. The form and thickness of these topaz masses vary abruptly from one part to another. This small-scale irregularity coupled with the patchy distribution of float seem to indicate that the topaz bodies are relatively small and not definitely tabular or lenticular in form. They are believed to be on the order of two to four feet thick and 20 to 30 feet long at a maximum. They are pretty sure to be elongated to north-northeast and to have steep to vertical dips. Drastic and irregular pinching and swelling is to be expected. Probably a zone of topaz pods lies a little (100 to 200 feet) east of the pyrophyllite bodies and extends along the upper slope of the ridge a little east of its crest from a point at least 200 to 300 feet south of the shaft, north-northeastward to the new mine road across the north end of the mountain.

Geologic evidence available indicates that exploration should begin with bulldozer trenches across areas of heavy topaz float to establish the position of topaz rock in place. The first trenches should trend east-west across places where big blocks of apparently richest topaz rock are concentrated. Three such places near the ridge summit are indicated on the accompanying sketch map. The trenches should be at least 50 feet long and extend in both directions well beyond the float indications. If topaz rock in place is thus exposed, the length of the body should be determined by trenching along its strike. If minable bodies of topaz rock are discovered by the initial trenching across float concentrations, then longer east-west trenches down the east slope of the mountain might be justified in order

to determine the width across strike of the zone in which topaz lenses are present. Core drilling should wait until the surface extent of the topaz bodies is established.

Exhibit "A"

DMA-1796-X

The Carolina Pyrophyllite Company
Staley, North Carolina

Location of Mine, Bowlings Mountain, Granville County, N. C.

It is proposed to excavate 1,000 feet of trenches to locate topaz deposits in place.

The work is to be done with a large sized bulldozer. The trenches will vary in depth depending on the thickness of overburden but probably will not exceed 10 feet.

The work will be done by the company with a rented bulldozer.

Locations of proposed trenches are shown on the attached map.

Eshibit "B" DMA-1796-X

The Carolina Pyrophyllite Company
Staley, North Carolina

No additional facilities, buildings or fixtures are to be purchased, installed or erected.

Exhibit "C"

DMA-1796-X

The Carolina Pyrophyllite Company
Staley, North Carolina

Below is a list of operating equipment to be rented by the operator for use on the project:

1 large, heavy duty bulldozer with dozer operator. Rented price of dozer to include wages of dozer operator.	
10 days at $16.00 per hour	$1,280.00
Transporation of dozer to and from property	250.00
	$1,530.00

6/5/51

Defense Minerals Administration

Review of Application for Exploration Assistance

Docket No. DMA-1796 X

Commodity Topaz (Mullite-Kyanite)

Total Amount $8,000 ea.

Govt. Participation 90%

1. Name and Address of Applicant Carolina Pyrophyllite Co., Capyco Div., Spruce Pine, N.C.

2. Location of Property 1½ mi. from Stem (on Southern Railway System) Granville County, North Carolina.

3. Mineral or metal Topaz (Kyanite) Is it listed in Section 9 of MO-5? Yes (Kyanite)

If not, application will be rejected.

4. Geologic probability of discovery—based on data in application (question #16, 17, 18, 20 and 22)*

Mines or Survey reports, etc., do you rate chances:

a) Good

b) Poor

c) None

d) Don't know—needs field examination ✓

e) Is there an alternative and favorable project?
(If so, attach an explanation)

5. Is the applicant's right to the property clearly stated? Yes—
(question 5, 6, 7)*

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

Does the lease have sufficient time to run to cover a future productive period? Yes — 10 yr. from Oct. 16, 1950

*question numbers are those of MF-103

7. Are subordination agreements necessary? Yes

a) MF-201? _____

b) MF-202 Not attached - (sent to owners for processing)

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

a) Available manpower Yes (not discussed in application)

b) Equipment and supplies Yes - (not discussed in application)
(Question 14 plus general knowledge of availability)*

c) Accessibility (question 12)* Yes

d) Water (question 13)* Yes

e) Power (question 13)* Yes - use gasoline or diesel equipment

Is a field check needed on any of these points? Yes

9. Does the experience of the applicant appear to be adequate to assure that he can properly conduct the proposed project? (question 4)* Yes -

Is a field check needed on this point? No -

10. Exhibit A. (questions 21 and 22)*

a) Is the project adequately described? No - (merely states, "core drilling to develop data ---")

If not, are there sufficient data given so that you can describe the project? No If so, attach a draft.

b) Is there an adequate map or sketch of the proposed work? No

c) Is the proposed work "exploration" under the definition of Section 8, MO-5? Yes -

If not, what part of it is? _____

Is this part a worthwhile exploration project? _____

d) Are the cost estimates detailed? No

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

e) Are the cost estimates reasonable? None given

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

g) Is a field examination necessary to complete Exhibit A? Yes -

11. Exhibit B (question 23-d)*

a) Is it applicable? Probably yes - no mention of construction

b) If so, are sufficient data furnished? No If so, attach a draft.

c) Is a field check needed? Yes -

12. Exhibit C (question 23-e, f and g)*

a) Is it applicable? Yes - no mention of needs

b) Sufficient data? No If so, attach a draft.

c) Are rents and charges reasonable? None given

d) Is a field check needed? Yes -

13. Exhibit D (question 23-a, b)*

a) Are there sufficient data? Yes - no mention of needs

b) Is the schedule adequate for the work proposed? _____

c) Is the schedule excessive for the work proposed? none given -

d) Are the proposed wages and salaries reasonable? (letter 6/28/51 - refers to reported project of Bahn)

e) Is a field check needed? Yes

14. Exhibit E (question 23-c)*

a) Is it applicable? No – no facilities on property

b) Sufficient data? —

c) Reasonable?

d) Field check needed? No

15. In your judgment, can the proposed work be done in the proposed time? No time listed – easily done in 2 yrs limit.

(All exploration must be completed within two years)

16. If field examination is not needed, attach your recommendation.

17. If field examination is needed, do you have any special instructions for the field team not indicated by your answers to the foregoing question? Outline exploration program & report amount of drilling & other work to be done, specify equipment & labor needed. Discuss with applicant the best method of exploration. I concur in recommendation that field examination be made. Since only float occurrences of topaz are known, it is probable that trenching would have to be done before drilling can be considered. (GHE)

Reviewed by: [illegible]

Gilbert H. Espenshade USGS. 7/18/51

Date 7/12/51

Note – Final approval may have to wait on Munitions Board changing specifications of Kyanite to "Mullite Type Refractories" understand that this is now being studied [illegible] 7/19

INT.-DUP. SEC., WASH., D.C. 99009

7/12/51

Docket No- DMA 1796X

In January 1951 this property was examined by the Bureau of Mines which reported the occurrence of a large amount of topaz in the float & recommended a limited amount of exploration work to try & locate topaz mineralization in place. The applicant apparently is basing its program on this examination.

Section 10- Exhibit "A"

No program of exploration is proposed, merely the statement, "Core drilling to develop data on topaz occurrence." Whether this is to be done by the applicant or let on contract is not mentioned nor are the locations of the holes specified.

The field team should inspect the property & determine the best method to explore it, possibly some bulldozing before the drilling would be advisable; the equipment to be used & the labor necessary. Whether the sum requested will be sufficient for a proper job should also be determined.

Section 11- Exhibit "B" - none necessary

No mention is made of any construction planned. Little if any should be necessary except for protection of equipment & supplies.

Section 12. Exhibit "C"

No mention of the equipment to be used is made no where it would be obtained or the cost. This should be investigated & specified by the field team.

(2)
7/1/51

DMA 1796 X

Section 13 Exhibit "D"

No mention is made of the number or type of labor to be used in the application. This should be studied by the field team after the exploration program is selected.

4 field [illegible]
1 field [illegible]
1 [illegible]

Section 14 Exhibit "E"

There are no facilities on the property so that no repairwork or rehabilitation will be necessary.

Section 16 - Recommendations

This application should be referred to the field team to determine the proper method for exploration & the probable cost of such a project. As described by the applicant a careful segregation should be made between the exploration for topaz & the work being done on pyrophyllite by the applicant. The Bureau of Mines report is encouraging enough to warrant careful consideration by the field team.

Apparently the applicant has had sufficient experience in the mineral production field to assure an efficient operation & their interest is sufficient to anticipate proper supervision. No statement is made as to the applicants' willingness & contribute its share of the costs of the exploration & such a statement should be secured.

DMG

6/5/51

Defense Minerals Administration

Review of Application for Exploration Assistance

Docket No. DMA-1796 X

Commodity Topaz (Mullite-Kyanite)

Total Amount $8,000.00

Govt. Participation 90%

1. Name and Address of Applicant Carolina Pyrophyllite Co., Cappco Div., Spruce Pine, N.C.

2. Location of Property 1½ mi. from Stem (on Southern Railway System) Granville County, North Carolina

3. Mineral or metal Topaz (Kyanite) Is it listed in Section 9 of MO-5? Yes (Kyanite)

If not, application will be rejected.

4. Geologic probability of discovery—based on data in application (question #16, 17, 18, 20 and 22)*

Mines or Survey reports, etc., do you rate chances:

a) Good

b) Poor

c) None

d) Don't know—needs field examination ✓

e) Is there an alternative and favorable project?
(If so, attach an explanation)

5. Is the applicant's right to the property clearly stated? Yes—
(question 5, 6, 7)*

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

Does the lease have sufficient time to run to cover a future productive period? Yes - 10 yr from Oct. 16, 1950

*question numbers are those of MF-103

7. Are subordination agreements necessary? Yes

a) MF-201? _____

b) MF-202 Not attached - (sent to owners for processing)

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

a) Available manpower Yes (not discussed in application)

b) Equipment and supplies Yes - (not discussed in application)
(Question 14 plus general knowledge of availability)*

c) Accessibility (question 12)* Yes

d) Water (question 13)* Yes

e) Power (question 13)* Yes - use gasoline or diesel equipment

Is a field check needed on any of these points? Yes

9. Does the experience of the applicant appear to be adequate to assure that he can properly conduct the proposed project? (question 4)* Yes -

Is a field check needed on this point? No -

10. Exhibit A. (questions 21 and 22)*

a) Is the project adequately described? No - (merely states, "overdrilling to develop data ---")

If not, are there sufficient data given so that you can describe the project? No If so, attach a draft.

b) Is there an adequate map or sketch of the proposed work? No

c) Is the proposed work "exploration" under the definition of Section 8, MO-5? Yes -

If not, what part of it is? _____

Is this part a worthwhile exploration project? _____

d) Are the cost estimates detailed? No

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

e) Are the cost estimates reasonable? None given

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

g) Is a field examination necessary to complete Exhibit A? Yes -

11. Exhibit B (question 23-d)*

a) Is it applicable? Probably yes - no mention of construction

b) If so, are sufficient data furnished? No If so, attach a draft.

c) Is a field check needed? Yes -

12. Exhibit C (question 23-e, f and g)*

a) Is it applicable? Yes - no mention of needs

b) Sufficient data? No If so, attach a draft.

c) Are rents and charges reasonable? None given

d) Is a field check needed? Yes -

13. Exhibit D (question 23-a, b)*

a) Are there sufficient data? Yes - no mention of needs

b) Is the schedule adequate for the work proposed?

c) Is the schedule excessive for the work proposed? none given - (letter 6/28/51 - refers to reported project of 6/19)

d) Are the proposed wages and salaries reasonable?

e) Is a field check needed? Yes

14. Exhibit E (question 23-c)*

a) Is it applicable? No - no facilities on property

b) Sufficient data? —

c) Reasonable?

d) Field check needed? No

15. In your judgment, can the proposed work be done in the proposed time? No time listed - easily done in 2 yr. limit.

(All exploration must be completed within two years)

16. If field examination is not needed, attach your recommendation.

17. If field examination is needed, do you have any special instructions for the field team not indicated by your answers to the foregoing question? Outline exploration program & report amount of drilling & other work to be done, specify equipment & labor needed. Discuss with applicant the best method of exploration.

I concur in recommendation that field examination be made. Since only float occurrences of topaz are known, it is probable that trenching would have to be done before drilling can be considered (GHE).

Reviewed by: [illegible] Gilbert H. Espenshade USGS 7/18/51

Date 7/12/51

INT.-DUP. SEC., WASH., D.C. 99009

7/12/51

Docket No- DMA 1796X

In January 1951 this property was examined by the Bureau of Mines which reported the occurrence of a large amount of topaz in the float & recommended a limited amount of exploration work to try & locate topaz mineralization in place. The applicant apparently is basing its program on this examination.

Section 10- Exhibit "A."

No program of exploration is proposed, merely the statement, "Core drilling to develop data on topaz occurrence." Whether this is to be done by the applicant or let on contract is not mentioned nor are the locations of the holes specified.

The field team should inspect the property & determine the best method to explore it, possibly some bulldozing before the drilling would be advisable; the equipment to be used & the labor necessary. Whether the sum requested will be sufficient for a proper job should also be determined.

Section 11- Exhibit "B"

No mention is made of any construction planned. Little if any should be necessary except for protection of equipment & supplies.

Section 12. Exhibit "C"

No mention of the equipment to be used is made no where it would be obtained or the cost. This should be investigated & specified by the field team.

(2)
9/12/51

DMA 1796 X

Section 13 Exhibit "D"

No mention is made of the number or type of labor to be used in the application. This should be studied by the field team after the exploration program is selected.

Section 14 - Exhibit "E"

There are no facilities on the property so that no repairwork or rehibilitation will be necessary.

Section 16 - Recommendations

This application should be returned to the field team to determine the proper method for exploration & the probable cost of such a project. As described by the applicant a careful segregation should be made between the exploration for topaz & the work being done on pyrophillite by the applicant. The Bureau of Mines report is encouraging enough to warrant careful consideration by the field team.

Apparently the applicant has had sufficient experience in the mineral production field to assure an efficient operation & their interest is sufficient to anticipate proper supervision. No statement is made as to the applicants willingness to contribute it's share of the costs of the exploration & such a statement should be secured.

DMB

DI-14
(August 1950)

SUBMIT IN TRIPLICATE

PHONE BRANCH 725

UNITED STATES
DEPARTMENT OF THE INTERIOR

BUREAU NO. 6012

All inquiries regarding this job should refer to Bureau Number

DUPLICATING SECTION NO.

REQUISITION FOR DUPLICATING, ADDRESSOGRAPH, PHOTOSTAT, AND BLUE-PRINT WORK

July 11, 1951

DELIVER TO ROOM NO. 3538

CHIEF, DUPLICATING SECTION, ROOM 1061.

Bureau ordering DIA Division Supply

Appropriation Salaries and expenses, Defense Production Activities, Department of the Interior, 1952

Title and description of job Review of Examination Report (Hayes heirs)

Number of copies 1 negative 1 positive

CHECK WORK DESIRED

(The following instructions must be clearly indicated)

☐ MULTIGRAPH: ☐ Single space. ☐ Double space.

☐ MIMEOGRAPH: Facsimile signature

☐ MULTILITH: Same size / Reduce to / Enlarge to / As indicated

☐ DUPLIMAT

Size of paper
☐ One side. ☐ Both sides.
☐ Assembling.
☐ Stapling: ☐ Once. ☐ Twice. ☐ End. ☐ Side.
☐ Punching (submit sample).
☐ Folding.
☐ Mail to

☐ Addressograph from lists
☐ Envelopes, size ☐ Fill in letters. ☐ Corrections.
☐ Proof list. ☐ Cards, size ☐ Tabulation sheets.
☐ Labels (submit sample). ☐ Payrolls.

☒ PHOTOSTAT: ☐ Negatives—same size X ☐ Enlarge to
☒ Positives—reduce to ☐ As indicated

☐ BLUE PRINT: ☐ Blue Line. ☐ Brown Line. ☐ Ozalid. ☐ Negative.

For further information see Mr. Vaskay 3538 (Room number) 5273 (Phone number)

Approved:

Chief Clerk of Bureau. Chief of Division.

Purchasing Clerk,
Property-Management Branch

Date wanted July 11, 1951 by 4:00P.M. if possible please.

16—62450-1

COPY FOR BUREAU FILE

16—62450-1 U. S. GOVERNMENT PRINTING OFFICE

Return original to Purchasing Branch

6-993

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Report Nos. RAL-448

REVIEW OF EXAMINATION REPORT

State North Carolina *County* Granville *Mineral products* Topaz Pyrophyllite

Name of property Mayes Property

Owner Mayes heirs *Address* Oxford and Stem, N. C.

Lessee or Operator Carolina Pyrophyllite *Address* Spruce Pine, N. C.

Location 4 miles west of Stem, N. C.

Examined by L. G. Marshall *Date* Jan. 26, 1951

Apparent quality of examination and report Superficial

Discussion and review: This property was brought to the attention of the Bureau of Mines by the Carolina Pyrophyllite Co. which is interested in the occurrence of pyrophyllite in this area. The Mayes property covers 150 acres.

While there are no outcrops on the property, there are several large areas containing both topaz and pyrophyllite float. The largest of these areas is approximately 300 feet wide and 2200 feet long. One shaft has been sunk to a depth of 60 feet and shows 40 feet of pyrophyllite. The property is of particular interest because of the occurrence of a large amount of topaz in the float.

The area is recommended for a limited amount of exploration work for the purpose of trying to locate topaz mineralization in place. If successful, additional development would be warranted.

Class "B"

DATE	ACTION	BY
2/6/51	Noted	[illegible]

Reviewed by V. J. Lynch
Date Feb. 6, 1951

16—53871-1 U. S. GOVERNMENT PRINTING OFFICE

Please return to Mrs. Shaw, Room 3610. T[illegible] have served their purpose.

BUREA[illegible] MINES
MO[illegible] WEATHER
TECHNICAL FILES
NO.....

UNITED STATES BUREAU OF MINES

SUMMARY REPORT OF WAR MINERALS EXAMINATION

State N. C. County Granville Mineral Products Topaz, pyrophyllite

Name of property or deposit Mayes property

Date examined 1/26/51 Engineer L. G. Marshall Date of this report 2/2/51

Engineer accompanied by J. J. Hume Address 108 Front St., Oxford, N.C.

Extent of property 150 acres

Owner Mayes Heirs Address Oxford & Stem, N.C.

Leased or optioned to Carolina Pyrophyllite Co. Address Spruce Pine, N.C.

Location of property (be specific) 0.9 miles on SW road from Stem, turn sharp right on Range Road for 3.4 miles, turn left for 0.8 miles to Bolen Mt.

Type of deposit and mineralogy (brief description) topaz and pyrophyllite as a replacement in volcanic tuffs and quartzites

Known dimensions of the ~~deposit~~ float area.
Length 2200' Width 300' Depth ??

Attitude of the deposit (strike, dip, etc.) no outcrops. The float follows the east flank of Bolen Mt. which stikes roughly N10E

Possible extensions; correlation of known showings There are two additional topaz float areas to the east; between Bolen Mt. and the Range Road, a distance of about ½ mile

Mine workings (brief description or attach map or sketch) (indicate whether accessible)

several shallow trenches and one 60' shaft showing about 40' of pyrophyllite

Mining and milling equipment on property none

(over)

Past production (if any) none

Present rate of production (if any) none

Sampling (describe briefly, or attach sketch) grab sample of topaz float taken

Tentative Estimate of Reserves
(Subject to revision when assays are received or after engineering calculations)

Measurable not sufficient data to estmate tonnage tons Grade

Indicated tons Grade

Inferred tons Grade

Mining method (actual or suggested) open pit

Milling or processing method (actual or suggested) --

Processing tests suggested --

Tentative Class of Report to be submitted (check one)
Class A ; Class B x ; Class C ; Memo

Tentative conclusion and reasons for it No topaz found in place. Some bulldozer work now being done that may expose criteria essential to arrive at a definite conclusion concerning attitude of the deposit

To be accompanied by brief letter giving examining engineer's general impression of the deposit, his impression of the owner, and any other confidential information he may care to submit. May be executed in pencil. Should be mailed within 24 hours after examination is completed.
Send copies to: District Engineer; Regional Engineer; Asst. Director, Washington 25, D. C.

Past production (if any) none

Present rate of production (if any) none

Sampling (describe briefly, or attach sketch) grab sample of topaz float taken

Tentative Estimate of Reserves
(Subject to revision when assays are received or after engineering calculations)

Measurable not sufficient data to estmate tonnage tons Grade

Indicated tons Grade

Inferred tons Grade

Mining method (actual or suggested) open pit

Milling or processing method (actual or suggested) —

Processing tests suggested —

Tentative Class of Report to be submitted (check one)
Class A ; Class B X ; Class C ; Memo

Tentative conclusion and reasons for it In topaz found in place. Some bulldozer work now being done that may expose criteria essential to arrive at a definite conclusion concerning attitude of the deposit.

To be accompanied by brief letter giving examining engineer's general impression of the deposit, his impression of the owner, and any other confidential information he may care to submit. May be executed in pencil. Should be mailed within 24 hours after examination is completed.
Send copies to: District Engineer, Regional Engineer, Asst. Director, Washington 25, D. C.

DMA-1796X Exploration Carolina Pyrophyllite Co., Cayyco Div., Spruce Pine, N.C.
Mullite-Kyanite
Region VII

Ore drilling project is propos[illegible] and the field team is requested to determine the proper method for exploration and the probable cost of such a project. $8,000 is requested.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.
Room 13, Post Office Building
Knoxville 01, Tennessee

July 26, 1951

Memorandum

To: Mr. Tom Lyon
Chairman, Coordinating Committee
Defense Minerals Administration

From: Executive Officer, Field Team, Region VII

Subject: DMA-1796X, Carolina Pyrophyllite Co.

Receipt of the following application, on this date, is hereby acknowledged:

1796X Carolina Pyrophyllite Company, Spruce Pine, N.C.

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

FILE COPY
SURNAME:

Barr
Lyon
Moon

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

July 10, 1951

Code 370

Carolina Lithia Co., Inc.
Sales Division
Spruce Pine
North Carolina

Subject: DMA 1[illegible]-X
Topaz (Lithia-Mica)

Gentlemen:

Your application has been referred to Mr. Robert Lawrence Hord 13, West Office Alley, Asheville, Ken Stone who is Executive Officer of the Field Team, [illegible], for further information.

Sincerely yours,

Tom Lyon, Director
Supply Division

Mimas

cc: Reports and Records Unit
Mr. Barr
DMA Files

Area 1796

856

FILE COPY
SURNAME:

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

July 9, 1951

Mr. J. E. Boyd
Vice President in Charge Operations
Carolina Pyrophyllite Company
Spruce Pine, North Carolina

Subject: DMA-1796X
Re: Exploration Loan

My dear Mr. Boyd:

Receipt is acknowledged of your application and attachments of June 28, 1951 for an exploration loan under the Defense Production Act of 1950.

The application was assigned Docket Number DMA-1796X and referred to Mr. James A. Barr, Chief, Industrial Minerals Branch on July 5, 1951.

In any future correspondence relating to your application, kindly refer to DMA-1796X.

Sincerely yours,

LANDON F. STROBEL

Landon F. Strobel
Executive Secretary

L. F. Strobel:jc
cc: Strobel
✓File
Barr
Lyon

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

Mr. Robert Laurence
Room 13
Post Office Building
Knoxville
Tennessee

Dear Bob:

We attach "Review of Application for Exploration Assistance" on:

Applicant Carolina Pyrophyllite Co., Capco Div., Spruce Pine, N.C.

Docket No. 1796-J

Commodity Topaz (Mullite-Kyanite)

Amount $ 48,000

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

Very truly yours,

Tom Lyon, Chairman
Coordinating Committee

RW:mas

cc: Mr. Moon
Mr. Barr

For Bureau of Mines

For Geological Survey

MEMORANDUM:

TO: Director, Production Expansion Division
Defense Minerals Administration

FROM: Director, Supply Division
Defense Minerals Administration

SUBJECT: Recommendation for Contract Approval

Name of Applicant: Carolina Pyrophyllite Co.
Copper Division
Shelby, N. C.

DMA No. [illegible]

Commodity: Topaz (Copper-[illegible])

Amount Requested: $ 3000

Amount Approved: $ 1950

Government Participation: 90% $ 1755

Tom Lyon

17967

Recommendation

1) That an Employment Aid Contract be granted in the amount of $1950, Government Participation 90%, in accordance with Exhibit "A", attached.

2) That applicant be allowed 30 days from contract date in which to begin work on the project.

Exhibit "A"

The work will consist of excavating approximately 1000' linear feet of bulldozer trenches through overburden to rock in place. Depth of trenches will vary, ~~[illegible]~~, perhaps maximum expected depth to about 10'. Widths of the trenches will depend on size of bulldozer blade available; maximum width at bottom of trenches will be about two blade, about 12'. Individual trenches will be from 200' to 400' feet in length each; approximate lengths and location of the trenches are shown on attached map.

The bulldozer will be rented by the operator on an hourly rental basis.

Cleaning in the bottom of the trenches

and sampling
will be done by hand labor supplied
by applicant.

Approximate total cost $1950, time
limit to complete work project 30 days.

Requirements & Costs:

Bulldozer rented 80 hrs @ $16.00		$1280
This machine will be a heavy duty unit and the rental rate will include operator, fuel, repairs, etc.		
Transportation of Bulldozer to and from operating		$250
1 — Superintendent ½ time @ $100 week		$100
4 — Laborers 10 days @ $40 week		320
Total		$1950

dma 1796 X

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.
Room 13, Post Office Building
Knoxville 01, Tennessee

July 2, 1951

Memorandum

To: Landon F. Strobel, Executive Secretary
Defense Minerals Administration

From: Robert A. Laurence

Subject: Carolina Pyrophyllite Company
Spruce Pine, N. C.

Attached herewith are four copies of completed Form MF-103 with attachments received this morning from Carolina Pyrophyllite Company, of Spruce Pine, North Carolina. The postmark date on the envelope was June 28, 1951.

Robert A. Laurence

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

cc: Wm.A.Beck

Enclosures

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 2 1951
LANDON F. STROBEL
Executive Secretary

Room 13, Post Office Building
Knoxville 01, Tennessee

July 2, 1951

Mr. J. S. Boyd
Vice President
In Charge of Operations
Carolina Pyrophyllite Company
Spruce Pine, North Carolina

Dear Mr. Boyd:

This will acknowledge receipt this morning of your letter of June 28, and four copies of Form MF-103 with attachments. These are being forwarded to the Washington office for review in accordance with established procedures.

It will be necessary to have more complete information on questions 21, 22, 23, and 24. Maps or description of the exact drill hole locations, proposed depths, etc. will help very much. I enclose herewith copy of Form MF-200 which is the contract form under which the project will be operated if approved. Please note that five Exhibits "A" to "E" are necessary to complete this contract. Therefore, as much of the data requested in those Exhibits as you can get in advance, will be of considerable help in evaluating the proposal.

Very truly yours,

Robert A. Laurance
Executive Officer
DMA Field Team, Region VII

RAL/mg

cc: Beck
Strobel
Enclosure

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 2 1951
LANDON F. STROBEL
Executive Secretary

CAROLINA PYROPHYLLITE COMPANY

J. E. BOYD,
VICE PRESIDENT

STALEY, NORTH CAROLINA

NEW YORK OFFICE
10 E. 40TH ST.

June 28, 1951

Please Reply:

Spruce Pine, N. C.

Defense Minerals Administration
U. S. Department of the Interior
Room 13 Post Office Building
Knoxville 1, Tennessee

Gentlemen:

Please refer to Form MF-103 attached, which we have filled out in part. This application concerns exploration of the recently discovered deposit of massive topaz. Topaz, when calcined, reverts to mullite, which is considered a strategic material. We understand India Kyanite is imported as a strategic material, but it, too, has to be calcined before it can be used commercially. We, therefore, feel that massive topaz should be considered a strategic material also.

Early this year we approached the Bureau of Mines with the idea of getting them to core drill this deposit, as they had the one in South Carolina, to determine the extent and commercial possibilities.

I am told this was under consideration by the Bureau of Mines and they had proposed to put it in line for handling during this 1951-1952 fiscal year. I believe their estimate was 1400 feet of core drilling at an estimated cost of $8,000.00.

Adjoining the area showing topaz on this property is a considerable area of pyrophyllite. Our company is proceeding with the development of this pyrophyllite, as it was our main interest when the lease was taken. We do not feel we would be justified in obligating the pyrophyllite project with expenses that might be incurred exploring for topaz and this application is made on the basis that payment of the loan for this exploration work would have to be confined to profits or income derived from topaz. This application is to concern only the topaz and minerals other than pyrophyllite that may be shown up by the drilling for topaz.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
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LANDON F. STROBEL
Executive Secretary

GUARANTEED CHEMI-TROLD PRODUCTS

Mr. Lynch, and I believe, Mr. Marshall, of the Bureau of Mines have both examined this property and may be in position to give a better explanation of the occurance than the writer.

Topaz shows up in varying amounts in the surface rocks over an area of two or three acres. The concentration is much higher in some points than in others. From appearances, the quality compares very favorably with that produced at the Brewer Mine in South Carolina. Our associate company, the United Feldspar & Minerals Corporation, operated the Brewer Mine in South Carolina for some time under a sub-lease.

It does not appear practical to answer all of the questions listed on the attached form; however, if this letter and those answers do not give sufficient information, kindly write us.

Yours very truly,

CAROLINA PYROPHYLLITE COMPANY

J E Boyd

Vice President
In Charge of Operations

JEBoyd:fa

Enclosures

P. S. We are forwarding the Landlord's Subordination Agreement Form to the property owners for handling.

Form MF-193
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.
Approval expires 6-30-51.

APPLICATION FOR AID FOR AN EXPLORATION PROJECT PURSUANT TO MINERAL ORDER 5, UNDER DEFENSE PRODUCTION ACT OF 1950

DO NOT FILL IN THIS BLOCK

Docket No. dma 1796 X

Date received 7-2-51

Participation

Carolina Pyrophyllite Company
Capyco Division
Staley, N. C. (Address All Communications to Spruce Pine, N. C.)

Name and address of applicant

Date June 28, 1951

FILL IN THIS BLOCK

Date of application June 28, 1951

Estimated cost $8,000.00

Mineral or metal Topaz

Percentage of Government participation 90%

Location of mine Stem, North Carolina

Date of filing MF-100 June 27, 1951

DMA Docket Number, if available

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four signed copies of the application to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive officer thereof, with your name and address on each sheet of the application and all accompanying papers. If any question is inapplicable, or if you cannot answer it, so state on the form. Where the space provided for answer is insufficient, answer on a separate sheet, annex it to the application form, and refer to it in space for answer. If the application is approved, you will be presented with an exploration project contract on Form MF-200, for your signature.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 2 1951
LANDON F. STROBEL
Executive Secretary

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation?
*2. If a partnership, state names and addresses of partners.
*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders.
*4. Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project.
*5. Are you the owner or the lessee of the property?
6. If owner, state what claims, liens, or encumbrances, if any, are against the property.
7. If lessee, attach a copy of the lease and state if it is in good standing.

NOTE.—It will be necessary to procure and attach to the exploration project contract agreements of claimants, lienors, encumbrances and lessors subordinating their interests in the property to the interest of the Government under the contract.

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement.
9. How much money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the cost of the project as detailed in question 23 of this application form, in accordance with the regulations on Government participation (Section 9 of Mineral Order 5)?

*If you have already answered these questions on MF-100, you are not required to answer the questions for this application.

16—64007-1

THE PROPERTY

10. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property.
    (*b*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted.

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

*11. State the present and former names of the property, if any.

*12. State, in detail, the location of the property with reference to towns, railroads, roads, shipping points, including distances and directions and kinds and conditions of roads.

*13. State source and quantity of water available for operations and its sufficiency at all seasons.
State amount of power to be used, rate per hour or other cost, and source.

*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work.

15. State in detail how the ore could be shipped and how and where milled.

*16. History:
    (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for any past suspensions of operations.
    (*b*) State briefly the known history and production of adjoining and neighboring properties.
    (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

*17. Production:
    (*a*) If mine is in production, furnish the following information:

	Tons per day	*Grade or analysis*	*Cost per ton*	*Net value per ton*
(1) Mining				
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(3) Shipped or sold				

*18. Ore or mineral reserves: (If property is or has been operating.)
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    NOTE.—The Government will not participate in a project that will require more than 2 years to complete.

22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data.

THE REQUIREMENTS AND COSTS

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:
    (*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each.
    (*b*) Supervisors, by numbers and positions, with salaries of each.
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    (*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings.
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    (*f*) Cost of rental for equipment which the operator proposes to rent.
    (*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work.
    (*h*) Cost of materials and supplies, including items of equipment costing less than $50 each.
    (*i*) Cost of power, water, utilities, and any other items not provided for above.

24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent.

CERTIFICATION

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

CAROLINA PYROPHYLLITE Co
(Name of company)

By J E Boyd
(Signature of authorized official)

June 27, 1951
(Date)

Vice Pres in Charge Operations
(Title)

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

*Same as footnote on page 1.

16—64067-1 U. S. GOVERNMENT PRINTING OFFICE

Carolina Pyrophyllite Company
Capyco Division
Staley, N. C.(Address All Communications to Spruce Pine, N. C.)

1. Corporation

2. No

3. Get Form MF-100

4. Get Form MF-100

5. Lessee

6. Not applicable

7. Copy attached

8. Attached

9. See letter this date

10.(a) As described in the attached lease dated October 16, 1950, with the exception of pyrophyllite areas as referred to in letter this date.

(b) See lease and letter referred to above.

11. John B. Mayes, Jr. and others

Granville Co. Road

12. Located in Bowling Mountain about 1½ miles from Stem, N. C., which is served by the Southern Railway System. Gravel county road from property to U. S. Highway #15 to Stem, N. C.

13. Springs and small streams supply water. Power requirements will not be large, probably not over 75 h.p. with small energy use. Line connections will have to be provided or, as an alternate, either diesel or gasoline type equipment.

14. None

15. In crude form by rail. No milling facilities are available.

16.(a) There was slight exploration of this property a few years ago for pyrophyllite, but the work was evidently abandoned. We examined it several times during 1950, taking a lease in October, 1950. Since that date we have done extensive work, removing over-burden, cross cutting and now have a core drilling program in process on the pyrophyllite areas. There has been no production from the property other than test lots.

(b) None

(c) No reports available on this property.

17. This mine is not in production.

18. See letter attached.

19. See letter.

20. Topaz

21. Core drilling to develop data on topaz occurance.

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.
Approval expires 6-30-51.

APPLICATION FOR AID FOR AN EXPLORATION PROJECT PURSUANT TO MINERAL ORDER 5, UNDER DEFENSE PRODUCTION ACT OF 1950

DO NOT FILL IN THIS BLOCK

Docket No. DMA 1796 X

Date received 7-2-51

Participation

Carolina Pyrophyllite Company
Copyco Division
Staley, N. C. (Address All Communications to Spruce Pine, N. C.)

Name and address of applicant

Date June 28, 1951

FILL IN THIS BLOCK

Date of application June 28, 1951

Estimated cost 68,000.00

Mineral or metal Topaz

Percentage of Government participation 90%

Location of mine Stem, North Carolina

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 2 1951
LANDON F. STROBEL
Executive Secretary

Date of filing MF-100 June 27, 1951

DMA Docket Number, if available

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*1. Is applicant an individual, partnership, or corporation?
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*4. Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project.
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6. If owner, state what claims, liens, or encumbrances, if any, are against the property.
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16—64067-1

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State amount of power to be used, rate per hour or other cost, and source.

*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work.

15. State in detail how the ore could be shipped and how and where milled.

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24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent.

CERTIFICATION

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

CAROLIN PYROPHYLLITE Co
(Name of company)

By J E Boyd
(Signature of authorized official)

June 27 1951
(Date)

Vice Pres in Charge Operations
(Title)

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*Same as footnote on page 1.

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Carolina Pyrophyllite Company
Capyco Division
Staley, N. C.(Address All Communications to Spruce Pine, N. C.)

1. Corporation

2. No

3. Get Form MF-100

4. Get Form MF-100

5. Lessee

6. Not applicable

7. Copy attached

8. Attached

9. See letter this date

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(b) See lease and letter referred to above.

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12. Located in Bowling Mountain about 1½ miles from Stem, N. C., which is served by the Southern Railway System. Gravel county road from property to U. S. Highway #15 to Stem, N. C.

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(April 1951)

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DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.
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Name and address of applicant

Date June 28, 1951

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Date of application June 28, 1951

Estimated cost $8,000.00

Mineral or metal Topaz

Percentage of Government participation 90%

Location of mine Stem, North Carolina

Date of filing MF-100 June 27, 1951

DMA Docket Number, if available

DEPARTMENT OF THE INTERIOR
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CAROLINA PYROPHYLLITE Co — By J E Boyd
(Name of company) — (Signature of authorized official)

June 27, 1951 — Vice Pres. in Charge Operations
(Date) — (Title)

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Staley, N. C.(Address All Communications to Spruce Pine, N. C.)

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(b) None

(c) No reports available on this property.

17. This mine is not in production.

18. See letter attached.

19. See letter.

20. Topaz

21. Core drilling to develop data on topaz occurance.

dma 1796X

June 28, 1951

Please Reply:

Spruce Pine, N. C.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 2 1951
LANDON F. STROBEL
Executive Secretary

Defense Minerals Administration
U. S. Department of the Interior
Room 13 Post Office Building
Knoxville 1, Tennessee

Gentlemen:

Please refer to Form DP-103 attached, which we have filled out in part. This application concerns exploration of the recently discovered deposit of massive topaz. Topaz, when calcined, reverts to mullite, which is considered a strategic material. We understand India Kyanite is imported as a strategic material, but it, too, has to be calcined before it can be used commercially. We, therefore, feel that massive topaz should be considered a strategic material also.

Early this year we approached the Bureau of Mines with the idea of getting them to core drill this deposit, as they had the one in South Carolina, to determine the extent and commercial possibilities.

I am told this was under consideration by the Bureau of Mines and they had proposed to put it in line for handling during this 1951-1952 fiscal year. I believe their estimate was 1400 feet of core drilling at an estimated cost of $8,000.00.

Adjoining the area showing topaz on this property is a considerable area of pyrophyllite. Our company is proceeding with the development of this pyrophyllite, as it was our main interest when the lease was taken. We do not feel we would be justified in obligating the pyrophyllite project with expenses that might be incurred exploring for topaz and this application is made on the basis that payment of the loan for this exploration work would have to be confined to profits or income derived from topaz. This application is to concern only the topaz and minerals other than pyrophyllite that may be shown up by the drilling for topaz.

Mr. Lynch, and I believe, Mr. Marshall, of the Bureau of Mines have both examined this property and may be in position to give a better explanation of the occurence than the writer.

Topaz shows up in varying amounts in the surface rocks over an area of two or three acres. The concentration is much higher in some points than in others. From appearances, the quality compares very favorably with that produced at the Brewer Mine in South Carolina. Our associate company, the United Feldspar & Minerals Corporation, operated the Brewer Mine in South Carolina for some time under a sub-lease.

It does not appear practical to answer all of the questions listed on the attached form; however, if this letter and those answers do not give sufficient information, kindly write us.

Yours very truly,

CAROLINA PYROPHYLLITE COMPANY

Vice President
In Charge of Operations

JEBoyd:fa

Enclosures

P. S. We are forwarding the Landlord's Subordination Agreement Form to the property owners for handling.

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.
Approval expires 6-30-51.

APPLICATION FOR AID FOR AN EXPLORATION PROJECT PURSUANT TO MINERAL ORDER 5, UNDER DEFENSE PRODUCTION ACT OF 1950

DO NOT FILL IN THIS BLOCK

Docket No. dma 1796X

Date received 7-2-51

Participation

Carolina Pyrophyllite Company
Capyco Division
Staley, N. C. (Address All Communications to Spruce Pine, N. C.)

Name and address of applicant

Date June 28, 1951

FILL IN THIS BLOCK

Date of application June 28, 1951

Estimated cost $8,000.00

Mineral or metal Topaz

Percentage of Government participation 90%

Location of mine Stem, North Carolina

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 2 1951
LANDON F. STROBEL
Executive Secretary

Date of filing MF-100 June 27, 1951

DMA Docket Number, if available

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four signed copies of the application to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive officer thereof, with your name and address on each sheet of the application and all accompanying papers. If any question is inapplicable, or if you cannot answer it, so state on the form. Where the space provided for answer is insufficient, answer on a separate sheet, annex it to the application form, and refer to it in space for answer. If the application is approved, you will be presented with an exploration project contract on Form MF-200, for your signature.

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation?
*2. If a partnership, state names and addresses of partners.
*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders.
*4. Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project.
*5. Are you the owner or the lessee of the property?
6. If owner, state what claims, liens, or encumbrances, if any, are against the property.
7. If lessee, attach a copy of the lease and state if it is in good standing.

NOTE.—It will be necessary to procure and attach to the exploration project contract agreements of claimants, lienors, encumbrances and lessors subordinating their interests in the property to the interest of the Government under the contract.

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement.
9. How much money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the cost of the project as detailed in question 23 of this application form, in accordance with the regulations on Government participation (Section 9 of Mineral Order 5)?

*If you have already answered these questions on MF-100, you are not required to answer the questions for this application.

16—64067-1

THE PROPERTY

10. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property.
    (*b*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted.

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

*11. State the present and former names of the property, if any.

*12. State, in detail, the location of the property with reference to towns, railroads, roads, shipping points, including distances and directions and kinds and conditions of roads.

*13. State source and quantity of water available for operations and its sufficiency at all seasons.
State amount of power to be used, rate per hour or other cost, and source.

*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work.

15. State in detail how the ore could be shipped and how and where milled.

*16. History:
    (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for any past suspensions of operations.
    (*b*) State briefly the known history and production of adjoining and neighboring properties.
    (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

*17. Production:
    (*a*) If mine is in production, furnish the following information:

	Tons per day	*Grade or analysis*	*Cost per ton*	*Net value per ton*
(1) Mining				
(2) Milling				
(3) Shipped or sold				

*18. Ore or mineral reserves: (If property is or has been operating.)
    (*a*) Describe the ore or mineral deposits briefly.
    (*b*) Submit available maps and assay data.
    (*c*) Give estimated tonnage and grade of each class of ore reserves.

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

THE EXPLORATION

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted?

21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it.

    NOTE.—The Government will not participate in a project that will require more than 2 years to complete.

22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data.

THE REQUIREMENTS AND COSTS

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:
    (*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each.
    (*b*) Supervisors, by numbers and positions, with salaries of each.
    (*c*) Cost of necessary repairs to existing facilities, structures, and buildings.
    (*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings.
    (*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each.
    (*f*) Cost of rental for equipment which the operator proposes to rent.
    (*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work.
    (*h*) Cost of materials and supplies, including items of equipment costing less than $50 each.
    (*i*) Cost of power, water, utilities, and any other items not provided for above.

24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent.

CERTIFICATION

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

Carolina Pyrophyllite Co
(Name of company)

By J. E. Boyd
(Signature of authorized official)

June 27 1951
(Date)

Vice Pres in Charge Operations
(Title)

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

*Same as footnote on page 1.

16—64067-1 U. S. GOVERNMENT PRINTING OFFICE

Carolina Pyrophyllite Company
Capyco Division
Staley, N. C.(Address All Communications to Spruce Pine, N. C.)

1. Corporation

2. No

3. Get Form MP-100

4. Get Form MP-100

5. Lessee

6. Not applicable

7. Copy attached

8. Attached

9. See letter this date

10.(a) As described in the attached lease dated October 16, 1950, with the exception of pyrophyllite areas as referred to in letter this date.

(b) See lease and letter referred to above.

11. John B. Hayes, Jr. and others

12. Located in Bowling Mountain about 1½ miles from Stem, N. C., which is served by the Southern Railway System. Gravel county road from property to U. S. Highway #15 to Stem, N. C.

13. Springs and small streams supply water. Power requirements will not be large, probably not over 75 h.p. with small energy use. Line connections will have to be provided or, as an alternate, either diesel or gasoline type equipment.

14. None

15. In crude form by rail. No milling facilities are available.

16.(a) There was slight exploration of this property a few years ago for pyrophyllite, but the work was evidently abandoned. We examined it several times during 1950, taking a lease in October, 1950. Since that date we have done extensive work, removing over-burden, cross cutting and now have a core drilling program in process on the pyrophyllite areas. There has been no production from the property other than test lots.

(b) None

(c) No reports available on this property.

17. This mine is not in production.

18. See letter attached.

19. See letter.

20. Topaz

21. Core drilling to develop data on topaz occurance.

North Carolina,

Granville County.

This agreement and lease, made and entered into this the 16th day of October, 1950, by and between John D. Hayes, Jr. and Mary Royall Hayes, his wife, Eloise H. Currin and Sidney T. Currin, her husband, Hallie M. Stem and Thad G. Stem, her husband, and Garland F. Hayes, unmarried, all of Granville County, North Carolina, and Melvin G. Hayes and Katie Lee Hayes, his wife, of Durham County, North Carolina, parties of the first part, hereinafter designated as lessors, and Carolina Pyrophyllite Company, a North Carolina corporation, with its principal office at No. 10 East 40th Street, in the City of New York, State of New York, with Branch Offices at Staley, North Carolina and Spruce Pine, North Carolina, party of the second part, hereinafter designated as lessee,

WITNESSETH

That for and in consideration of the sum of $10.00 paid to said lessors by said lessee, the receipt of which is hereby fully acknowledged, and of the covenants and agreements hereinafter set out, said lessors have leased and demised, and by these presents do hereby grant, lease and demise to the said lessee, its successors and assigns, for a term or period of ten years beginning on the date of this agreement and lease, those two certain tracts or parcels of land, situate in Tally Ho Township, Granville County, North Carolina, more particularly described and defined as follows:

FIRST TRACT: That tract of land which in that certain deed from the United States of America by Federal Farm Mortgage Corporation to Mrs. Hallie Hayes Stem, Melvin G. Hayes, John D. Hayes, Jr., Garland F. Hayes and Mrs. Eloise Hayes Currin, of record in Deed Book 130, at Page 170, in the office of the Register of Deeds of Granville County, is described as follows:

"All of a certain tract or parcel of land situate in Tally Ho Township, Granville County, North Carolina, containing 153 acres, more or less, said tract being bounded, now or formerly, as follows: On the North by lands of W. B. Cash; on the East by lands of L. A. Bullock; L. D. Franklin and L. J. Gooch; on the South by lands of L. D. Franklin and L. J. Gooch; and on the West by lands of L. D. and J. E. Franklin, John D. Hayes, L. D. Franklin and L. J. Gooch.

Being Tract No. F-73-C of Camp Butner and being a portion of the lands acquired by the United States by Declaration of Taking No. 4 in the case of the United States of America vs. 9,275.45 acres and 21,772.00 acres of land, more or less, situate in Granville County, North Carolina, George Collins, Mattie Toms Buchanan, et al., being Civil Docket No. 141 in the District Court of the United States for the Eastern District of North Carolina, Raleigh Division."

See deed from J. C. Hundley and wife to John B. Hayes, of record in Deed Book 58, at page 201, in the office of the Register of Deeds of Granville County.

SECOND TRACT: That tract of land which in that certain deed from the United States of America by Federal Farm Mortgage Corporation to Mrs. Hallie Hayes Stem, Melvin B. Hayes, John B. Hayes, Jr., Garland P. Hayes and Mrs. Eloise Hayes Currin, of record in Deed Book 129, at page 126, in the office of the Register of Deeds of Granville County, is described as follows:

"All of a certain tract or parcel of land situate in Tally Ho Township, Granville County, North Carolina, containing 60 acres, more or less, said tract being bounded, now or formerly, as follows: On the North by lands of L. D. Franklin and L. J. Cooch, and John B. Hayes and W. T. Harris Estate; on the East by lands of John B. Hayes and W. T. Harris Estate; on the South by lands of L. D. and C. R. Franklin; and on the West by lands of Burley Smith.

Being Tract No. F-63-C of Camp Butner and being a portion of the lands acquired by the United States by Declaration of Taking No. 3-13 in the case of the United States of America vs. 9,275.45 acres and 21,772.00 acres of land, more or less, situate in Granville County, North Carolina, George Collins, Mattie Toms Buchanan, et al., being Civil Docket No. 141 in the District Court of the United States for the Eastern District of North Carolina, Raleigh Division."

See deed from J. H. Long, Trustee, to John B. Hayes, of record in Deed Book 57, at page 415, and deed from Cary D. Currin, unmarried, to John B. Hayes, Jr., of record in Deed Book 107, at page 181, in the office of the Register of Deeds of Granville County.

Said two tracts above described are contiguous, said second tract, containing 60 acres, more or less, adjoins said first tract, containing 153 acres, more or less, and is directly West of said first tract.

This agreement and lease is made subject to the provisions and reservations in said two deeds from the United States of America to said lessors, hereinbefore referred to, relative to uranium, thorium, and other materials determined to be peculiarly essential to the production of fissionable material.

It is also understood and agreed that said lessors, their heirs and assigns, shall not in any way or to any extent be responsible or liable to any person, firm or corporation who may suffer, or claim to suffer, any injury, damage or loss, to person, property, or property rights, caused or produced, or claimed to be caused or produced, by the explosion of any shell, instrument, material or thing upon the premises hereby leased or below the surface of said premises.

To have and to hold said lands and premises for the purposes herein expressed, unto said lessee, its successors and assigns, for and during the period of this lease, and during the period of any renewal, if any, of said lease, for the purpose and with the exclusive right in the said lessee, its successors and assigns, of prospecting for, mining and removing all pyrophyllite, feldspar, mica and other minerals upon said premises or therein, except such as have been reserved by the United States of America, as aforesaid. And said lessors hereby warrant that they are the owners of the full and unencumbered fee simple title of said premises with good and full right to grant and lease the same.

It is further understood, contracted and agreed:

FIRST: (a) That the lessee, its successors and assigns, shall pay to the lessors, their heirs and assigns, a fixed or minimum annual rental of $1,000.00, per annum, for each and every year, except for the first year, during the term of this lease and during the term, if any, of the renewal of said lease, on the 16th days of October of each and every year, beginning on the 16th day of October, 1951, said annual rental payments to be credited on account of the royalties payable hereunder. Acceptance of each royalty check, except such checks as are in payment of said fixed or minimum annual rental, by said lessors for the period covered by such payment shall constitute full settlement and release of all claims of the lessors, their heirs and assigns, against the lessee, its successors and assigns, for

the period and to the date for which such check is issued.

(b) The lessee, its successors and assigns, will pay to the lessors, their heirs and assigns, as rent a royalty of $1.00 on each net ton (2,000 pounds) of topaz, and 45 cents on and for each net ton (2,000 pounds) of pyrophyllite mined and removed from the leased premises by said lessee, its successors and assigns, said royalties to be paid on or before the tenth day of each month for royalties payable for the preceding month. Should other minerals be mined the lessee, its successors and assigns, will pay for such other minerals or substances mined, removed and sold by said lessee, its successors and assigns, the prevailing royalties in that particular industry, that is, the prevailing royalty for each particular mineral or substance mined, said payments, as to the time of payment, to be the same as applies hereunder to payments for topaz and pyrophyllite. It is understood and agreed that neither the lessors, their heirs and assigns, nor the lessee, its successors and assigns, shall give away waste materials, but that the said lessee, its successors and assigns, may sell the same and pay to the lessors, their heirs and assigns, 25 cents for each net ton (2,000 pounds) sold.

SECOND: The lessors hereby grant to the lessee, its successors and assigns, an exclusive option to renew this lease on the same terms for a further term of ten years, by sending notice of the exercise of such option by registered mail addressed to the lessors, their heirs and assigns, at Oxford, N. C., at least thirty days prior to the expiration of this lease.

THIRD: The lessors grant to the lessee full rights of ingress and egress from the public highway to and across said lands and any other lands owned by the lessors, at points convenient for the lessee, for all purposes connected with the prospecting or mining operations of the lessee, and full right to blast, excavate, and leave holes, tunnels, or open places in connection with such operations, to have all ores found thereon assayed, to use water, water power, wood, timber, stone and other

suitable materials thereon which the lessee may require in carrying on said operations, and generally to exercise such other privileges as may be necessary in its opinion for the conduct of such operations, without being chargeable therefor, except that it will pay the lessors the fair local value of any merchantable timber taken by it for construction or mining operations. The lessee may place, erect and maintain thereon any buildings, machinery or structures for use in connection with its operations, and may remove same and any minerals theretofore mined within six months after the termination of the original or renewed term of this lease. The lessors, their heirs and assigns, hereby reserve and shall have the right to cut and remove and to sell and convey any and all timber upon the premises hereby leased, except such as may be required by lessee, its successors and assigns, for construction or mining operations, and shall have the right to manufacture the same into lumber, provided that the cutting, manufacturing and removing of such timber is performed in such manner as not to interfere with the lessee, its successors and assigns, in their mining operations; and provided further that the said lessors, their heirs and assigns, shall help to bear the expense of repairing the roads used by said lessee in the event such road or roads are cut up or damaged to any appreciable extent by the use of same in connection with such cutting, manufacturing and removal of such timber.

FOURTH: The lessee, its successors and assigns, shall avoid wilful and unnecessary destruction, damage and injury to said premises, but shall not be responsible for the collapse of stages, tunnels, walls or cuts due to weathering, lack of support or other causes.

FIFTH: The lessee may cancel this lease as of the end of the first year or of the second year of its term of lease, respectively, by giving thirty days notice, by registered mail, to the lessors, their heirs and assigns, at the address of Oxford, N. S.; that if not cancelled as of the end of the first year nor of the second year of its term of lease the lessee, its

successors and assigns, may cancel this lease as of the end of the fifth year, provided (a) that the quality, quantity or location of the remaining disclosed pyrophyllite deposits on the leased property is such that the lessee in its bona fide opinion can no longer conduct profitable mining operations thereon, or (b) that the continued conduct of mining operations on the leased premises involves in the bona fide opinion of the lessee, too great a hazard of loss of life or limb or of destruction of mining machinery or equipment by reason of the presence in the subsoil of artillery or bazooka shells or other explosives, by giving thirty days notice, by registered mail, to the lessors, their heirs and assigns, at the address of Oxford, N. C.

SIXTH: The lessee, its successors and assigns, shall keep adequate records of all minerals and substances mined by said lessee, its successors and assigns, from the leased premises. Such records shall be open for inspection by the lessors, their heirs and assigns, or designated representative, on reasonable notice.

SEVENTH: If during the original or any renewed term of this lease the lessors, their heirs and assigns, shall receive a bona fide offer acceptable to them for the sale or lease of said lands or minerals rights for a term to commence after the expiration of the original or renewed term of this lease, the lessors agree promptly to notify the lessee, its successors and assigns, by registered mail addressed to the Home Office of said lessee, in New York City, State of New York, of the terms of each said offer, and the lessee, its successors and assigns, may within twenty days after the receipt of same, accept the same in its own right. Failure by the lessee to exercise such option shall not affect its rights as lessee.

EIGHTH: No representations have been made by any party hereto, other than those therein expressly set forth.

In witness whereof, the lessors, for themselves, their heirs and assigns, have hereunto set their hands and affixed their seals, and the lessee, for itself, its successors and assigns, have caused these presents to be signed by its President, attested by its Secretary, and its corporate seal to be hereto affixed, this the day and year first above written.

Witnesses as to Lessors' Signatures:

Elsie C. Knott
Witness as to John B. Mayes, Jr., Mary Royall Mayes, Eloise M. Currin, Sidney T. Currin, Hallie M. Stem, Thad G. Stem and Garland F. Mayes

Clyde M. Kelly
Witness as to Melvin S. Mayes and Katie Lee Mayes.

John B. Mayes, Jr. (SEAL)

Mary Royall Mayes (SEAL)

Eloise M. Currin (SEAL)

Sidney T. Currin (SEAL)

Hallie M. Stem (SEAL)

Thad G. Stem (SEAL)

Garland F. Mayes (SEAL)

Melvin S. Mayes, Sr. (SEAL)

Katie Lee Mayes (SEAL)

Lessors

CAROLINA PYROPHYLLITE COMPANY

BY _____
President
Lessee

ATTEST:

_____
Secretary of Carolina Pyrophyllite Company

North Carolina,

Granville County.

I, Elsie C. Knott, a Notary Public of Granville County, North Carolina, do hereby certify that on this day personally appeared before me John B. Hayes, Jr. and Mary Royall Hayes, his wife, Sidney T. Currin and Cleice H. Currin, his wife, Thad G. Iten and Sallie L. Iten, his wife, and Garland P. Hayes, some of the signers and sealers of the foregoing agreement and lease, and acknowledged the due execution thereof on their parts for the purposes therein expressed; and the said Mary Royall Hayes, wife of John B. Hayes, Jr., Cleice H. Currin, wife of Sidney T. Currin, and Sallie L. Iten, wife of Thad G. Iten, each being by me privately examined, separate and apart from her said husband, touching her voluntary execution of the same, each doth say that she signed the same freely and voluntarily, without fear or compulsion of her said husband or any other person, and that she doth still voluntarily assent thereto.

Witness my hand and notarial seal, this the 16th day of October, 1950.

Elsie C. Knott
Notary Public

My commission expires December 9, 1950

(Notarial Seal)

North Carolina,

Durham County.

I, Clyde M. Kelly, a Notary Public of Durham County, North Carolina, do hereby certify that on this day personally appeared before me Melvin S. Hayes and Katie Lee Hayes, his wife, some of the signers and sealers of the foregoing agreement and lease, and acknowledged the due execution thereof on their parts for the purposes therein expressed; and the said Katie Lee Hayes, wife of Melvin S. Hayes, being by me privately examined, separate and apart from her said husband, touching her voluntary execution of the same, doth state that she signed the same freely and voluntarily, without fear or compulsion of her said husband, or any other person, and that she doth still voluntarily assent thereto.

(Notarial Seal)

City of _____

County of _____

State of _____

I, _____, a Notary Public of _____, do hereby certify that on this day personally appeared before me _____, with whom I am personally acquainted, who, being by me duly sworn, says that _____ is the President, and that _____ is the Secretary of the Carolina Pyrophyllite Company, the corporation described in and which executed the foregoing agreement and lease; that he knows the common seal of the said corporation; that the seal affixed to the foregoing instrument is said common seal, and the name of the corporation was subscribed thereto by the said President, and that the said President and said Secretary subscribed their names thereto, and said common seal was affixed, all by order of the Board of Directors of said corporation, and that the said instrument is the act and deed of said corporation.

Witness my hand and notarial seal, this the _____ day of _____, 1959.

_____
Notary Public

My commission expires _____

North Carolina,

Granville County.

Thad G. Stem, being first duly sworn, deposes and says, that he is a citizen of the State of North Carolina, and resides in Oxford, Granville County, in said State; that affiant is 66 years of age; that he has intimately known Melvin S. Hayes and Katie Lee Hayes, the wife of Melvin S. Hayes, (the parties who along with others executed that certain agreement and lease, dated October 16th, 1950, to Carolina Pyrophyllite Company and which, in triplicate, was recently forwarded to Carolina Pyrophyllite Company, 10 East 40th Street, New York 16, New York) for more than 50 years; that the said Melvin S. Hayes is one of the heirs at law and devisees of John B. Hayes (Sr.), deceased, the other children and heirs at law and devisees of the said John B. Hayes, (Sr.), deceased, being John B. Hayes, Jr., Eloise H. Currin, Hallie H. Stem and Garland P. Hayes; that affiant knows it to be a fact that the said Melvin S. Hayes, who signed said agreement and lease as Melvin S. Hayes, Sr., and the Melvin S. Hayes designated in said agreement and lease is one and the same person; that the said Melvin S. Hayes, son of John B. Hayes (Sr.), deceased has a son whose name is Melvin S. Hayes, Jr., who resides in the State of Oregon; that the said Melvin S. Hayes, who resides in Durham, North Carolina, is the only Melvin S. Hayes who lives anywhere in the State of North Carolina, insofar as affiant is informed, and the only Melvin S. Hayes whose wife is Katie Lee Hayes; that affiant married Hallie Hayes (now Hallie Hayes Stem) June 1st, 1909, and has known all of the members of the Hayes family ever since affiant was a boy; that in the community in which affiant resides some persons who have sons of the same name of the father add "Sr." after their namesand signatures, but the custom is for the father to leave off the "Sr." and for the son always to add "Jr." after his name and signature; that in the past affiant has prepared several deeds and other documents which the said Melvin S. Hayes has signed, and knows it to be a fact that heretofore the said Melvin S. Hayes has signed such documents simply as "Melvin S. Hayes", whereas, the Melvin S. Hayes, Jr., whose wife is named Evelyn, signs his name "Melvin S. Hayes, Jr."

Thad G. Stem

Sworn to and subscribed before me,
this the 24th day of October, 1950.

Notary Public

My commission expires 12-9-50

FILED FOR REGISTRATION THIS 8TH. DAY OF NOVEMBER 1950 AT 10:20 O'CLOCK A. M. AND REGISTERED IN THE OFFICE OF THE REGISTER OF DEEDS FOR GRANVILLE COUNTY N. C. BOOK #131 Page #328.

FLORA O. MANN
REGISTER OF DEEDS

CAROLINA PYROPHYLLITE COMPANY

BALANCE SHEET

As of May 31, 19 51

ASSETS AND OTHER DEBITS				
CURRENT ASSETS	REF.			
CASH IN BANK (GENERAL ACCOUNT)		23,066.71		
PETTY CASH AND IMPREST ACCOUNT (PLANT)		5,177.01		
TOTAL CASH AND IMPREST ACCT.			28,243.72	
ACCOUNTS RECEIVABLE	3		50,467.12	
NOTES RECEIVABLE			1,500.00	
INVENTORIES			24,926.20	
TOTAL CURRENT ASSETS				105,137.04
SPECIAL DEPOSITS & FUNDS				
INTEREST ACCOUNT (BONDS, NOTES, ETC.)				
TRUSTEE, REPLACEMENT FUND, CASH			15,917.97	
TRUSTEE, REPLACEMENT FUND, INVESTMENT				
ACCUMULATION ACCOUNT				
Special - Glendon Indenture			793.29	
TOTAL SPECIAL DEPOSITS & FUNDS				16,711.26
PREPAYMENTS	5			3,207.81
DEFERRED ITEMS	5			25,696.69
PLANT PROPERTY AND INVESTMENTS				
LAND, BUILDINGS, MACHINERY, FIXTURES, ETC.			96,409.27	
REAL ESTATE				
MINERAL DEPOSITS			130,528.85	
INVESTMENTS				
CONSTRUCTION-IN-PROCESS	19		18,898.28	
" " " Spec.-R.E.W.			2,773.80	
TOTAL PLANT PROPERTY AND INVESTMENTS				248,610.20
PATENTS, TRADE-MARKS, Etc.				1,180.44
TOTAL ASSETS AND OTHER DEBITS				400,543.44

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CAROLINA PYROPHYLLITE COMPANY

BALANCE SHEET

As of May 31, 19 51

ASSETS AND OTHER DEBITS				
CURRENT ASSETS	REF.			
CASH IN BANK (GENERAL ACCOUNT)		23,066.71		
PETTY CASH AND IMPREST ACCOUNT (PLANT)		5,177.01		
TOTAL CASH AND IMPREST ACCT.			28,243.72	
ACCOUNTS RECEIVABLE	3		50,467.12	
NOTES RECEIVABLE			1,500.00	
INVENTORIES			24,926.20	
TOTAL CURRENT ASSETS				105,137.04
SPECIAL DEPOSITS & FUNDS				
INTEREST ACCOUNT (BONDS, NOTES, ETC.)				
TRUSTEE, REPLACEMENT FUND, CASH			15,917.97	
TRUSTEE, REPLACEMENT FUND, INVESTMENT				
ACCUMULATION ACCOUNT				
Special - Glendon Indenture			793.29	
TOTAL SPECIAL DEPOSITS & FUNDS				16,711.26
PREPAYMENTS	5			3,207.81
DEFERRED ITEMS	5			25,696.69
PLANT PROPERTY AND INVESTMENTS				
LAND, BUILDINGS, MACHINERY, FIXTURES, ETC.			96,409.27	
REAL ESTATE				
MINERAL DEPOSITS			130,528.85	
INVESTMENTS				
CONSTRUCTION-IN-PROCESS	19		18,898.28	
" " " Spec.-R.E.W.			2,773.80	
TOTAL PLANT PROPERTY AND INVESTMENTS				248,610.20
PATENTS, TRADE-MARKS, Etc.				1,180.44
TOTAL ASSETS AND OTHER DEBITS				400,543.44

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CAROLINA PYROPHYLLITE COMPANY

BALANCE SHEET

As of May 31, 1951

LIABILITIES AND OTHER CREDITS				
CURRENT LIABILITIES	REF.			
ACCOUNTS PAYABLE	6		6,044.23	
NOTES PAYABLE (The Chatham Bank)	7		10,000.00	
TOTAL CURRENT LIABILITIES				16,044.23
ACCRUED LIABILITIES	8-			
TAXES			1,017.80	
INTEREST			13.14	
MISCELLANEOUS			10,768.72	
TOTAL ACCRUALS				11,799.66
AMT. DUE PARENT COMPANY				5,309.24
FIXED LIABILITIES				
NOTES PAYABLE				
(COLLATERAL) "SERIES A" $ B $				
"SERIES A" 1ST. MTGE. 5% BONDS DUE 1959 - AUTHRZD.		50,000.00		
LESS: TREASURY BONDS		50,000.00		
COLLATERAL TO LOANS $				
IN SAFE DEPOSIT BOX $				
"SERIES B" 1ST. MTGE. 5% BONDS DUE 1964 - AUTHRZD.				
LESS: TREASURY BONDS				
TOTAL FIXED LIABILITIES				
RESERVES	8-			
RES. FOR DEPRECIATION - PAST $			43,599.62	
RES. FOR DEPLETION - PAST $			117,777.21	
RES. FOR BAD DEBTS				
RES. FOR RESEARCH AND DEVELOPMENT			7,741.68	
RES. FOR REPAIRS			6,523.89	
" " Patent Amortization			670.56	
TOTAL RESERVES				163,265.18
TOTAL LIABILITIES				196,418.31
CAPITAL				
COMMON STOCK (1,000 SHARES OUTSTANDING)			100,000.00	
SURPLUS ( )	10		104,125.13	
TOTAL CAPITAL				204,125.13
TOTAL LIABILITIES AND OTHER CREDITS				400,543.44

WTS-A1523

CAROLINA PYROPHYLLITE COMPANY

BALANCE SHEET

As of May 31, 1951

LIABILITIES AND OTHER CREDITS				
CURRENT LIABILITIES	REF.			
ACCOUNTS PAYABLE	6		6,044.23	
NOTES PAYABLE (The Chatham Bank)	7		10,000.00	
TOTAL CURRENT LIABILITIES				16,044.23
ACCRUED LIABILITIES	8-			
TAXES			1,017.80	
INTEREST			13.14	
MISCELLANEOUS			10,768.72	
TOTAL ACCRUALS				11,799.66
AMT. DUE PARENT COMPANY				5,309.24
FIXED LIABILITIES				
NOTES PAYABLE				
(COLLATERAL) "SERIES A" $ B $				
"SERIES A" 1ST. MTGE. 5% BONDS DUE 1959 - AUTHRZD.		50,000.00		
LESS: TREASURY BONDS		50,000.00		
COLLATERAL TO LOANS $				
IN SAFE DEPOSIT BOX $				
"SERIES B" 1ST. MTGE. 5% BONDS DUE 1964 - AUTHRZD.				
LESS: TREASURY BONDS				
TOTAL FIXED LIABILITIES				
RESERVES	8-			
RES. FOR DEPRECIATION - PAST $			43,599.62	
RES. FOR DEPLETION - PAST $			117,777.21	
RES. FOR BAD DEBTS				
RES. FOR RESEARCH AND DEVELOPMENT			7,741.68	
RES. FOR REPAIRS			6,523.89	
" " Patent Amortization			670.56	
TOTAL RESERVES				163,265.18
TOTAL LIABILITIES				196,418.31
CAPITAL				
COMMON STOCK (1,000 SHARES OUTSTANDING)			100,000.00	
SURPLUS ( )	10		104,125.13	
TOTAL CAPITAL				204,125.13
TOTAL LIABILITIES AND OTHER CREDITS				400,543.44

WTS-A1523

CAROLINA PYROPHYLLITE COMPANY

BALANCE SHEET

As of May 31, 1951

LIABILITIES AND OTHER CREDITS				
CURRENT LIABILITIES	REF.			
ACCOUNTS PAYABLE	6		6,044.23	
NOTES PAYABLE (The Chatham Bank)	7		10,000.00	
TOTAL CURRENT LIABILITIES				16,044.23
ACCRUED LIABILITIES	8-			
TAXES			1,017.80	
INTEREST			13.14	
MISCELLANEOUS			10,768.72	
TOTAL ACCRUALS				11,799.66
AMT. DUE PARENT COMPANY				5,309.24
FIXED LIABILITIES				
NOTES PAYABLE				
(COLLATERAL) "SERIES A" $ B $				
"SERIES A" 1ST. MTGE. 5% BONDS DUE 1959 - AUTHRZD.		50,000.00		
LESS: TREASURY BONDS		50,000.00		
COLLATERAL TO LOANS $				
IN SAFE DEPOSIT BOX $				
"SERIES B" 1ST. MTGE. 5% BONDS DUE 1964 - AUTHRZD.				
LESS: TREASURY BONDS				
TOTAL FIXED LIABILITIES				
RESERVES	8-			
RES. FOR DEPRECIATION - PAST $			43,599.62	
RES. FOR DEPLETION - PAST $			117,777.21	
RES. FOR BAD DEBTS				
RES. FOR RESEARCH AND DEVELOPMENT			7,741.68	
RES. FOR REPAIRS			6,885.09	
" " Patent Amortization			670.56	
TOTAL RESERVES				163,265.18
TOTAL LIABILITIES				196,418.31
CAPITAL				
COMMON STOCK (1,000 SHARES OUTSTANDING)			100,000.00	
SURPLUS ( )	10		104,125.13	
TOTAL CAPITAL				204,125.13
TOTAL LIABILITIES AND OTHER CREDITS				400,543.44

WTS-A1523

CAROLINA PYROPHYLLITE COMPANY

BALANCE SHEET

As of May 31, 1951

LIABILITIES AND OTHER CREDITS				
CURRENT LIABILITIES	REF.			
ACCOUNTS PAYABLE	6		6,044.23	
NOTES PAYABLE (The Chatham Bank)	7		10,000.00	
TOTAL CURRENT LIABILITIES				16,044.23
ACCRUED LIABILITIES	8-			
TAXES			1,017.80	
INTEREST			13.14	
MISCELLANEOUS			10,768.72	
TOTAL ACCRUALS				11,799.66
AMT. DUE PARENT COMPANY				5,309.24
FIXED LIABILITIES				
NOTES PAYABLE				
(COLLATERAL) "SERIES A" $ B $				
"SERIES A" 1ST. MTGE. 5% BONDS DUE 1959 - AUTHRZD.		50,000.00		
LESS: TREASURY BONDS		50,000.00		
COLLATERAL TO LOANS $				
IN SAFE DEPOSIT BOX $				
"SERIES B" 1ST. MTGE. 5% BONDS DUE 1964 - AUTHRZD.				
LESS: TREASURY BONDS				
TOTAL FIXED LIABILITIES				
RESERVES	8-			
RES. FOR DEPRECIATION - PAST $			43,599.62	
RES. FOR DEPLETION - PAST $			117,777.21	
RES. FOR BAD DEBTS				
RES. FOR RESEARCH AND DEVELOPMENT			7,741.68	
RES. FOR REPAIRS			[illegible]	
" " Patent Amortization			670.56	
TOTAL RESERVES				163,265.18
TOTAL LIABILITIES				196,418.31
CAPITAL				
COMMON STOCK (1,000 SHARES OUTSTANDING)			100,000.00	
SURPLUS ( )	10		104,125.13	
TOTAL CAPITAL				204,125.13
TOTAL LIABILITIES AND OTHER CREDITS				400,543.44

WTS-A1523

CAROLINA PYROPHYLLITE COMPANY

PROFIT AND LOSS STATEMENT

For the Month of , 194

And the 5 Months Ended May 31 , 1951

	MONTH OF	FOR THE 5 MONTHS ENDED 5/31 1951
GROSS SALES		182,003.11
LESS: - RETURNS AND ALLOWANCES		160.91
NET SALES		181,842.20
OTHER INCOME		
OTHER INCOME AND EXPENSES - PAGE 17		15,100.40
GROSS REVENUE		196,942.60
OPERATING CHARGES (INCLUDING DEPRECIATION)		
COST OF SALES - PAGE 13		106,761.58
SELLING EXPENSES - PAGE 14		6,344.68
ADMINISTRATIVE AND GENERAL EXPENSES - PAGE 15		411.90
RESEARCH AND DEVELOPMENT - PAGE 8		7,741.68
PATENT LICENSE ROYALTIES		
TAXES (OTHER THAN FEDERAL AND STATE INCOME) - PAGE 16		1,245.69
BAD DEBTS		
MANAGERIAL EXPENSES - PAGE 15		27,982.96
NON-OPERATING EXPENSES - PAGE 18		156.50
Rental - Leased Property		3,233.35
Patent Amortization		69.85
SUB TOTAL		153,948.19
DEPRECIATION		2,864.70
DEPLETION		13,284.00
TOTAL OPERATING CHARGES (INCLUDING DEPRECIATION)		170,096.89
GROSS INCOME		26,845.71
DEDUCTIONS FROM GROSS INCOME		
INTEREST ON FIRST MORTGAGE BONDS		1,744.58
INTEREST ON OTHER DEBT		13.14
Bond Discount & Expense		1,580.00
TOTAL DEDUCTIONS		3,337.72
BALANCE OF GROSS INCOME		23,507.99
PROVISIONS FROM INCOME TAXES AND OTHER DEDUCTIONS		
BONUS-SALARIES		
FEDERAL AND STATE INCOME TAXES		
CONTINGENCIES		
TOTAL PROVISIONS FOR INCOME TAXES AND OTHER DEDUCTIONS		
NET INCOME		23,507.99

CAROLINA PYROPHYLLITE COMPANY

PROFIT AND LOSS STATEMENT

For the Month of , 194

And the 5 Months Ended May 31 , 1951

	MONTH OF	FOR THE 5 MONTHS ENDED 5/31 1951
GROSS SALES		182,003.11
LESS: - RETURNS AND ALLOWANCES		160.91
NET SALES		181,842.20
OTHER INCOME		
OTHER INCOME AND EXPENSES - PAGE 17		15,100.40
GROSS REVENUE		196,942.60
OPERATING CHARGES (INCLUDING DEPRECIATION)		
COST OF SALES - PAGE 13		106,761.58
SELLING EXPENSES - PAGE 14		6,344.68
ADMINISTRATIVE AND GENERAL EXPENSES - PAGE 15		411.90
RESEARCH AND DEVELOPMENT - PAGE 8		7,741.68
PATENT LICENSE ROYALTIES		
TAXES (OTHER THAN FEDERAL AND STATE INCOME) - PAGE 16		1,245.69
BAD DEBTS		
MANAGERIAL EXPENSES - PAGE 15		27,982.96
NON-OPERATING EXPENSES - PAGE 18		156.50
Rental - Leased Property		3,233.35
Patent Amortization		69.85
SUB TOTAL		153,948.19
DEPRECIATION		2,864.70
DEPLETION		13,284.00
TOTAL OPERATING CHARGES (INCLUDING DEPRECIATION)		170,096.89
GROSS INCOME		26,845.71
DEDUCTIONS FROM GROSS INCOME		
INTEREST ON FIRST MORTGAGE BONDS		1,744.58
INTEREST ON OTHER DEBT		13.14
Bond Discount & Expense		1,580.00
TOTAL DEDUCTIONS		3,337.72
BALANCE OF GROSS INCOME		23,507.99
PROVISIONS FROM INCOME TAXES AND OTHER DEDUCTIONS		
BONUS-SALARIES		
FEDERAL AND STATE INCOME TAXES		
CONTINGENCIES		
TOTAL PROVISIONS FOR INCOME TAXES AND OTHER DEDUCTIONS		
NET INCOME		23,507.99

CAROLINA PYROPHYLLITE COMPANY

PROFIT AND LOSS STATEMENT

For the Month of , 194

And the 5 Months Ended May 31 , 1951

	MONTH OF	FOR THE 5 MONTHS ENDED 5/31 1951
GROSS SALES		182,003.11
LESS: - RETURNS AND ALLOWANCES		160.91
NET SALES		181,342.20
OTHER INCOME		
OTHER INCOME AND EXPENSES - PAGE 17		15,100.40
GROSS REVENUE		196,942.60
OPERATING CHARGES (INCLUDING DEPRECIATION)		
COST OF SALES - PAGE 13		106,761.58
SELLING EXPENSES - PAGE 14		6,344.68
ADMINISTRATIVE AND GENERAL EXPENSES - PAGE 15		411.90
RESEARCH AND DEVELOPMENT - PAGE 8		7,741.68
PATENT LICENSE ROYALTIES		
TAXES (OTHER THAN FEDERAL AND STATE INCOME) - PAGE 16		1,245.69
BAD DEBTS		
MANAGERIAL EXPENSES - PAGE 15		27,982.96
NON-OPERATING EXPENSES - PAGE 18		156.50
Rental - Leased Property		3,233.35
Patent Amortization		69.85
SUB TOTAL		153,948.19
DEPRECIATION		2,864.70
DEPLETION		13,284.00
TOTAL OPERATING CHARGES (INCLUDING DEPRECIATION)		170,096.89
GROSS INCOME		26,845.71
DEDUCTIONS FROM GROSS INCOME		
INTEREST ON FIRST MORTGAGE BONDS		1,744.58
INTEREST ON OTHER DEBT		13.14
Bond Discount & Expense		1,580.00
TOTAL DEDUCTIONS		3,337.72
BALANCE OF GROSS INCOME		23,507.99
PROVISIONS FROM INCOME TAXES AND OTHER DEDUCTIONS		
BONUS-SALARIES		
FEDERAL AND STATE INCOME TAXES,		
CONTINGENCIES		
TOTAL PROVISIONS FOR INCOME TAXES AND OTHER DEDUCTIONS		
NET INCOME		23,507.99

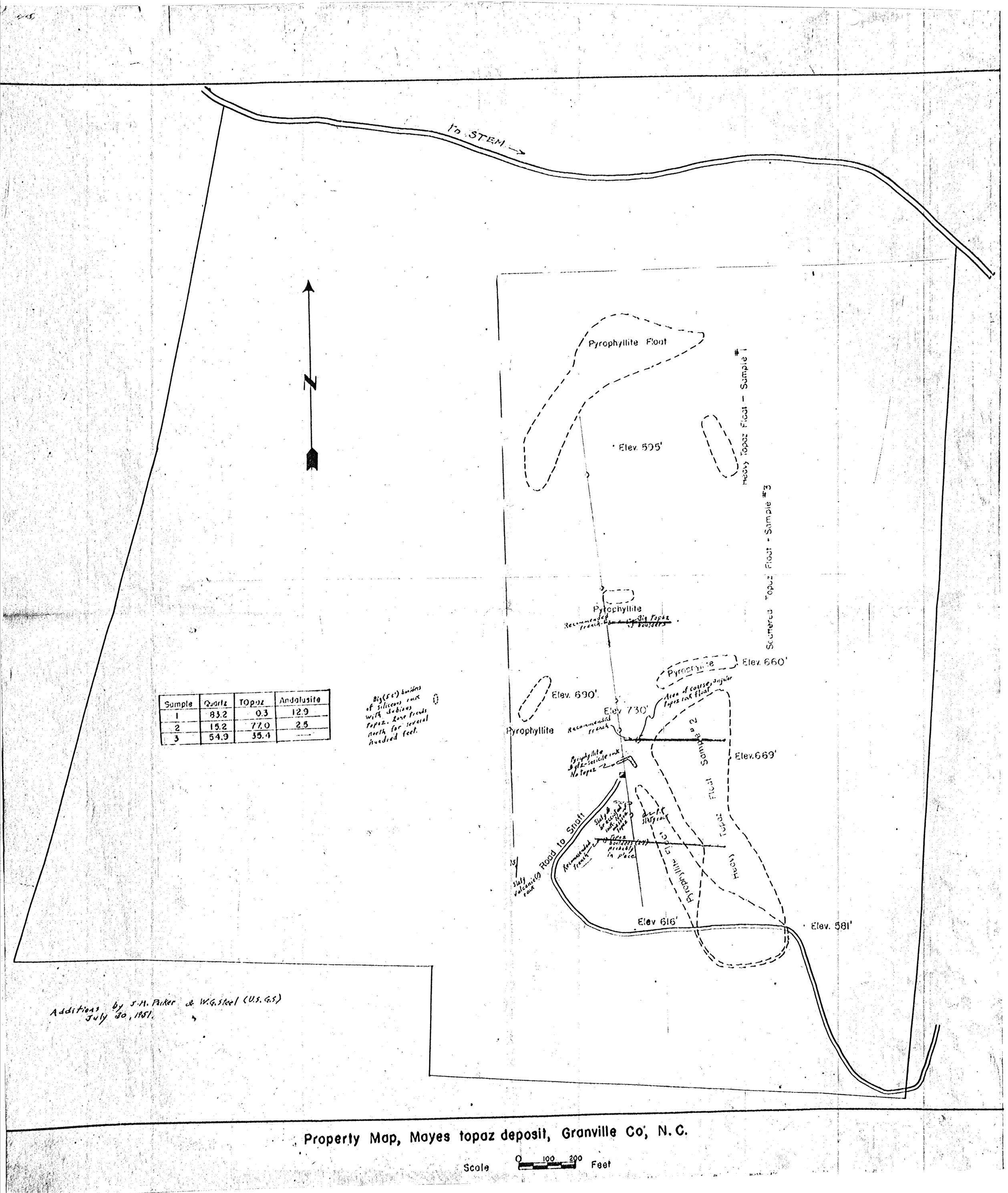
CAROLINA PYROPHYLLITE COMPANY

PROFIT AND LOSS STATEMENT

For the Month of , 194

And the 5 Months Ended May 31 , 1951

	MONTH OF	FOR THE 5 MONTHS ENDED 5/31 1951
GROSS SALES		182,003.11
LESS: - RETURNS AND ALLOWANCES		160.91
NET SALES		181,842.20
OTHER INCOME		
OTHER INCOME AND EXPENSES - PAGE 17		15,100.40
GROSS REVENUE		196,942.60
OPERATING CHARGES (INCLUDING DEPRECIATION)		
COST OF SALES - PAGE 13		106,761.38
SELLING EXPENSES - PAGE 14		6,544.38
ADMINISTRATIVE AND GENERAL EXPENSES - PAGE 15		411.90
RESEARCH AND DEVELOPMENT - PAGE 8		7,741.08
PATENT LICENSE ROYALTIES		
TAXES (OTHER THAN FEDERAL AND STATE INCOME) - PAGE 16		1,245.69
BAD DEBTS		
MANAGERIAL EXPENSES - PAGE 15		27,982.96
NON-OPERATING EXPENSES - PAGE 18		155.50
Rental - Leased Property		3,233.35
Patent Amortization		69.85
SUB TOTAL		153,948.19
DEPRECIATION		2,864.70
DEPLETION		13,284.00
TOTAL OPERATING CHARGES (INCLUDING DEPRECIATION)		170,096.89
GROSS INCOME		26,845.71
DEDUCTIONS FROM GROSS INCOME		
INTEREST ON FIRST MORTGAGE BONDS		1,744.58
INTEREST ON OTHER DEBT		13.14
Bond Discount & Expense		1,580.00
TOTAL DEDUCTIONS		3,337.72
BALANCE OF GROSS INCOME		23,507.99
PROVISIONS FROM INCOME TAXES AND OTHER DEDUCTIONS		
BONUS-SALARIES		
FEDERAL AND STATE INCOME TAXES		
CONTINGENCIES		
TOTAL PROVISIONS FOR INCOME TAXES AND OTHER DEDUCTIONS		
NET INCOME		23,507.99



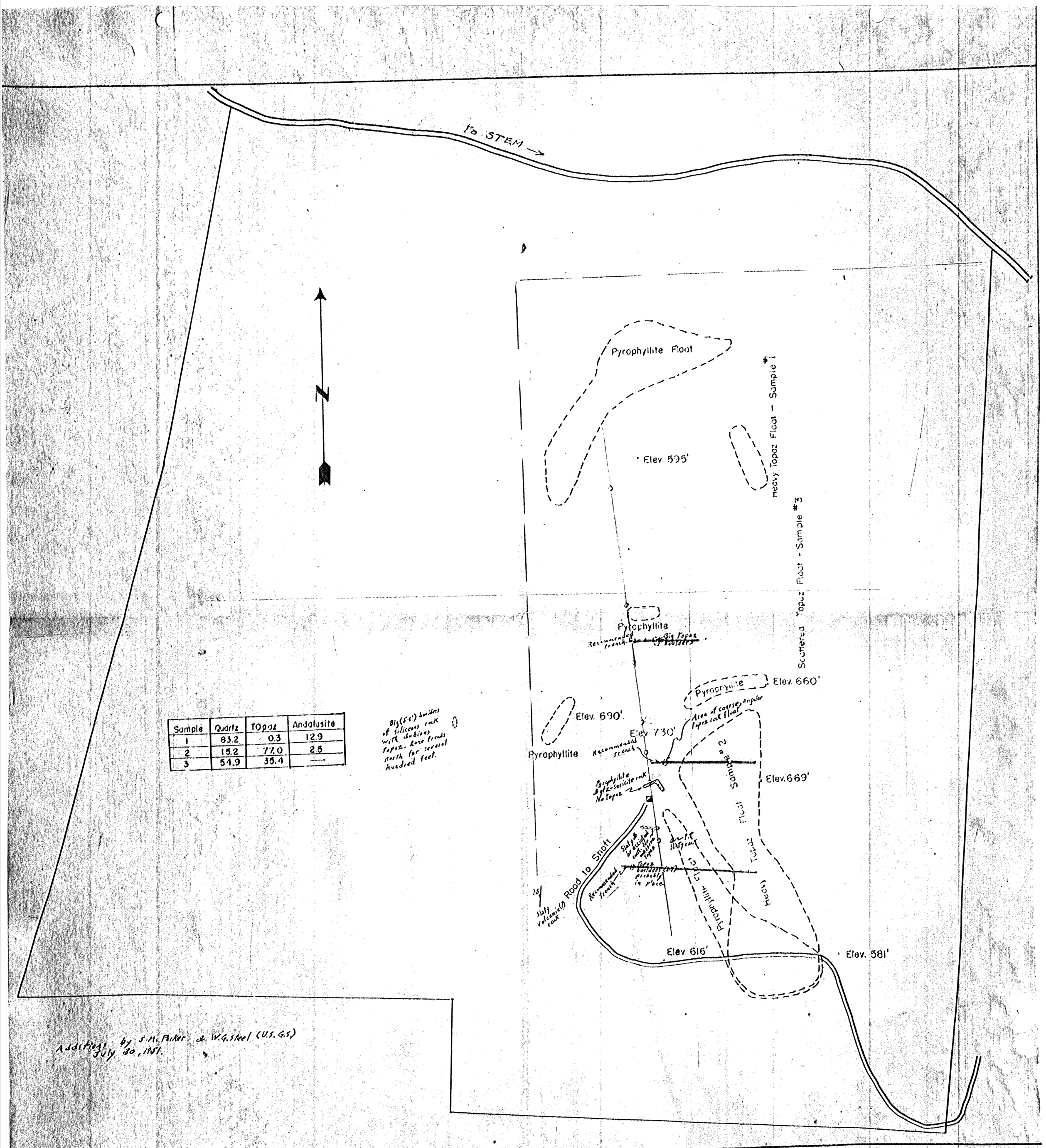
Sample	Quartz	Topaz	Andalusite
1	83.2	0.3	12.9
2	15.2	77.0	2.5
3	54.9	35.4	—

Big (5'-6') boulders of siliceous rock with dubious topaz. Zone trends north for several hundred feet.

Additions by J.M. Parker & W.G. Steel (U.S.G.S.) July 30, 1951.

Property Map, Mayes topaz deposit, Granville Co., N.C.

Scale 0 100 200 Feet



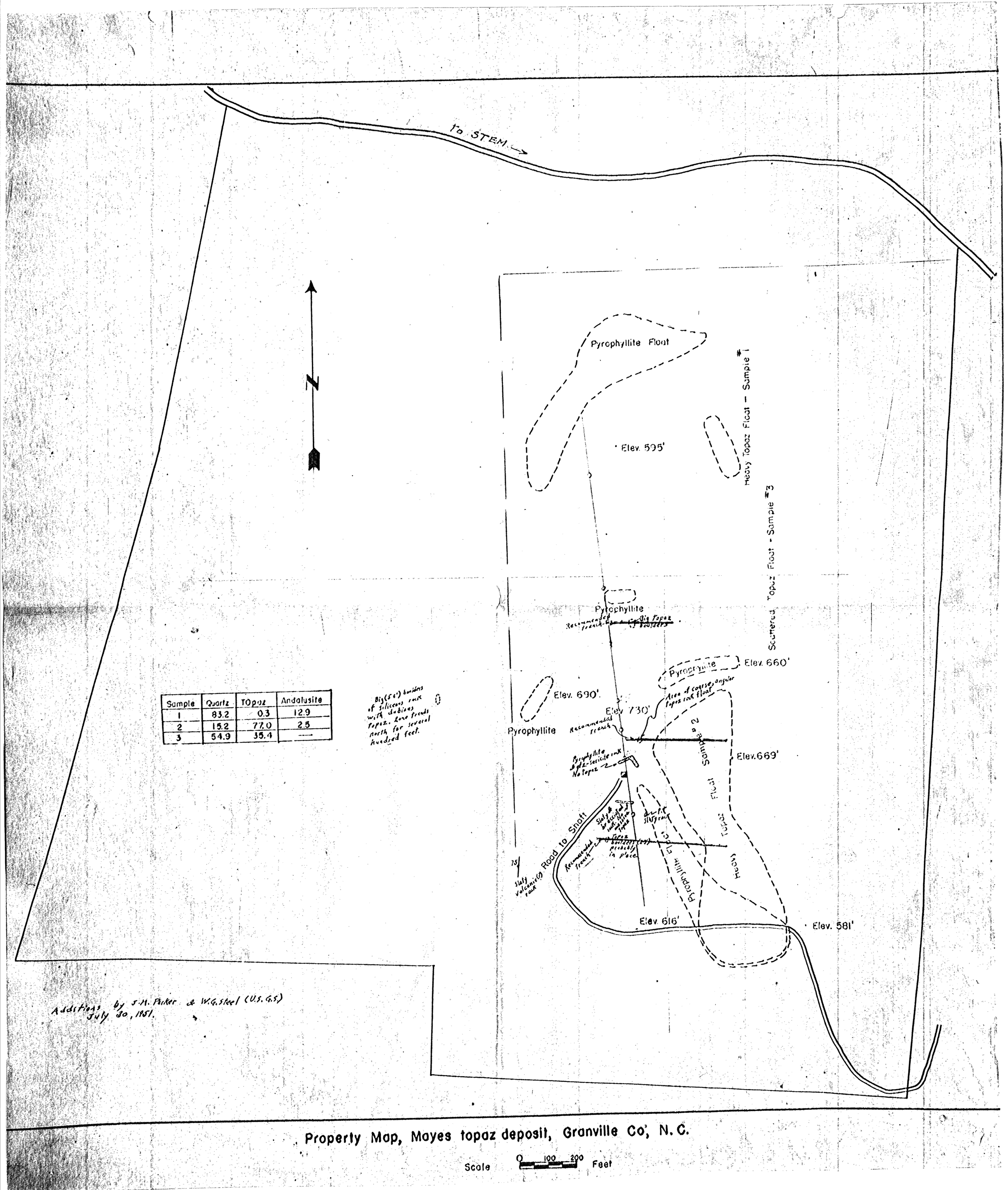
Sample	Quartz	TOpaz	Andalusite
1	83.2	0.3	12.9
2	15.2	77.0	2.8
3	54.9	35.4	—

Big (5'ø') boulders of siliceous rock with dubious topaz. Zone trends north for several hundred feet.

Additions by J.M. Parker & W.G. Steel (U.S.G.S.) July 30, 1951.

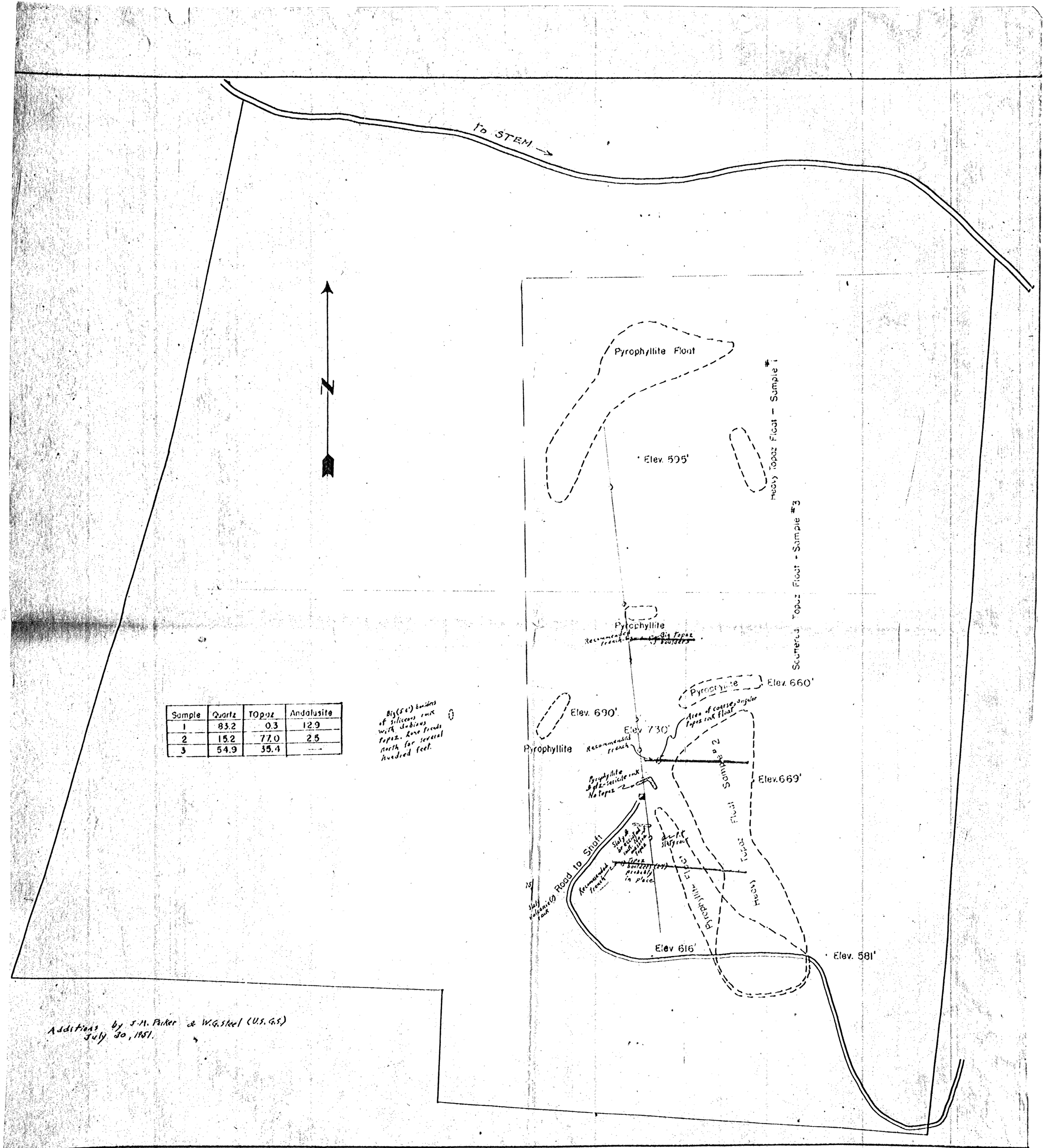
Property Map, Moyes topaz deposit, Granville Co., N.C.

Scale 0 100 200 Feet



Sample	Quartz	TOpaz	Andalusite
1	83.2	0.3	12.9
2	15.2	77.0	2.5
3	54.9	35.4	——

Property Map, Mayes topaz deposit, Granville Co., N.C.



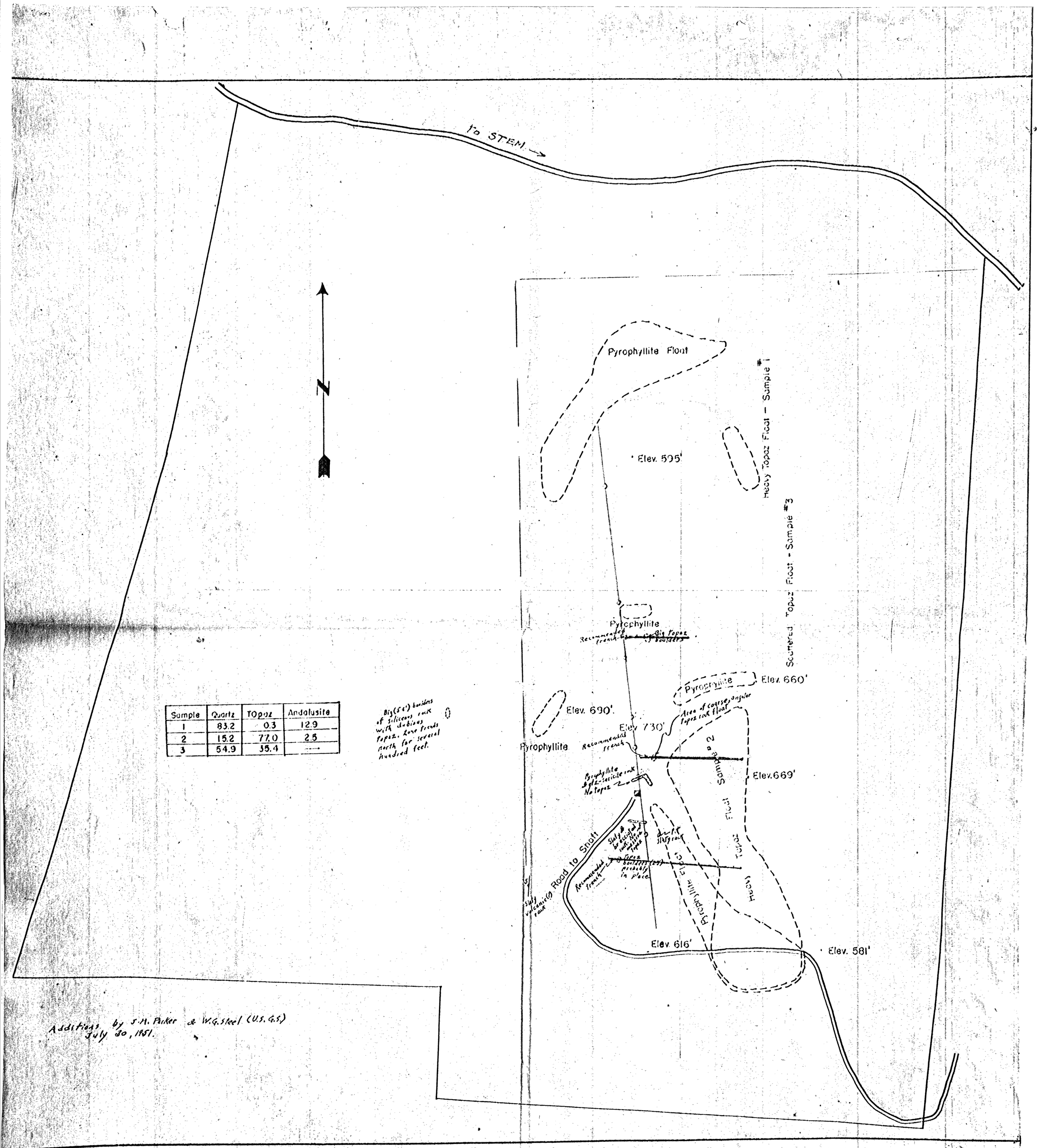
Sample	Quartz	TOpaz	Andalusite
1	83.2	0.3	12.9
2	15.2	77.0	2.5
3	54.9	35.4	—

Big (5'-6') boulders of siliceous rock with dubious topaz. Zone trends north for several hundred feet.

Additions by J.M. Parker & W.G. Steel (U.S.G.S.) July 30, 1951.

Property Map, Mayes topaz deposit, Granville Co., N.C.

Scale 0 100 200 Feet



Sample	Quartz	TOpaz	Andalusite
1	83.2	0.3	12.9
2	15.2	77.0	2.5
3	54.9	35.4	----

Property Map, Mayes topaz deposit, Granville Co., N.C.

Scale 0 100 200 Feet