DMA Form 1

DEFENSE MINERALS ADMINISTRATION
Control Slip

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DMA Docket No. 3429

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Exploration Assistance

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Routing Slip

To:	~~500~~	Date	~~8/4/54~~
To:	400	Date	8/5/54
To:	Oper Com	Date	8-18-54
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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON 25, D. C.

400

Department of the Interior
Defense Minerals Administration
RECEIVED
NOV 24 1954

November 23, 1954

Memorandum

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee, Room 4445

From: John E. Crawford, Bureau of Mines Member
Uranium Commodity Committee

Subject: DMEA Docket No. 3429, Thwaites and Chapman, 84 State Street, Boston 9, Massachusetts

I have reviewed the subject report and have discussed it with Joseph O. Hosted, representative of the Atomic Energy Commission.

We concur with the recommendation of the Field Team that the application involved under the subject docket be denied.

The report has been forwarded to Mr. Robert W. Geehan, in accordance with the routing slip, for his appraisal of the molybdenum and tungsten potentialities of the properties.

John E. Crawford

Chron
Returned Nov 5

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON 25, D. C.

Department of the Interior
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John E. Crawford

400

NOV 5 - 1954

Mr. John V. Chapman
Thwaites and Chapman
[illegible] State Street, Room [illegible]
Boston [illegible], Massachusetts

Re: Docket No. DMEA 3429
Drew Lake Property - Copper, Tungsten, Lead, Zinc.
Littleton Property - Molybdenum, Copper, Uranium, Tungsten
Aroostook County, Maine

Dear Mr. Chapman:

Your application for aid for an exploration project and other data available to us in Washington relating to the above-noted properties have been carefully reviewed.

Projects approved by the Defense Minerals Exploration Administration must, in its judgment, show definite promise of yielding materials of an acceptable grade in quantities that will significantly improve the mineral supply position for the National Defense.

Careful study of all our information, although noting small amounts of copper, lead, zinc, molybdenum, and tungsten mineralization on your property, indicates to us that the probability of disclosing minable ore reserves by your proposed program is not sufficiently promising to justify Government participation. We regret to advise, therefore, that your application for exploration assistance is denied.

We wish to thank you for your interest in the Defense Minerals Exploration Administration program and for bringing your property to our attention.

Sincerely yours,

C. O. Mittendorf

Administrator

cc: DOCKET
CODE 400
FT, REG. 8
ADM. READ. FILE
OPER. COMM.
R. W. GEEHAN, USBM
THOR KIILSGAARD, USGS

TLChapman/ls
11/3/54

400

November 3, 1954

MEMORANDUM

To: Administrator, DMEA

From: Iron and Ferro-Alloys Division, DMEA

Subject: Denial of application for exploration assistance in the amount of $41,000.00
Docket No. DMEA 3429
Thwaites and Chapman
Drew Lake property - Copper, Tungsten, Lead, Zinc.
Littleton property - Molybdenum, Copper, Uranium, and Tungsten
Aroostook County, Maine

The denial of the subject application by this Division is based on the following information:

(1) The applicant requested exploration assistance in the amount of $41,000.00 to explore for copper, lead, zinc, molybdenum, tungsten, and uranium, on the Drew Lake property and the Littleton property, Aroostook County, Maine.

(2) The country rock in the Drew Lake property is a granite-syenite which intrudes a phyllite. A shear zone cuts through the granite-syenite a few hundred yards from the phyllite contact. This shear zone shows copper, lead, zinc, silver, and tungsten mineralization, but the grade is too low to be of economic value.

The country rock of the Littleton area is a limestone with a narrow brecciated zone which shows some copper, molybdenum, and tungsten; the results of scanning with a scintillator for radio-activity were negative.

(3) Work on the property consists of a number of shallow pits and trenches. Except for picked samples, the grade of ore is very low.

(4) The Field Team and the commodity divisions of the Geological Survey and the Bureau of Mines recommend that the application be denied.

TLChapman/ls
11/3/54

Oper. Comm.
cc: Docket
Code 400
Adm. Read. File

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

IN REPLY REFER TO:

402

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

Defense Minerals
NOV 2 - 1954

November 1, 1954

Re: DMEA-3429
Thwaites & Chapman
(Brew's Lake and
Littleton Properties)
Aroostook Co., Maine
$41,000

Memorandum

To: W. S. Martin, Defense Minerals Exploration Administration

From: E. L. Newcomb, U. S. Geological Survey

Subject: Review of Field Team examination report

The applicants proposed a trenching and diamond drilling project to explore for tungsten, copper, lead, and zinc.

The Field Team has recommended the application be denied.

Present workings consist of four test pits and one trench. Mineralization occurs in sparse amounts in a network of quartz veinlets along a prominent shear zone in granite or syenite. Pyrite, pyrrhotite, sphalerite, galena and scheelite are present in the quartz veinlets, but in sparse amounts. No minable concentrations were noted by the examiners.

The thinness of the veins and the paucity of scheelite, chalcopyrite, molybdenite, sphalerite and galena mineralization along the shear zone indicate that DMEA assistance is not geologically justified.

I recommend this application be denied exploration assistance.

E. L. Newcomb

ELNewcomb:hlm
G-11/1/54

Copy to: Director's reading, 4212
Branch reading, 4212
DMEA (3)
Docket file
R. W. Geehan, 3513

400

Defense Minerals Administration
RECEIVED
OCT 22 1954

College Park, Maryland

October 21, 1954

Memorandum

To: George C. Selfridge, Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region VIII

Subject: Docket No. DMEA-3429
Thwaites and Chapman, 84 State St., Boston 9, Mass.
Drew's Lake Property - (Copper-Tungsten-Lead-Zinc)
Littleton Property - (Molybdenum-Copper-Uranium-Tungsten)
Aroostook County, Maine

Transmitted herewith are the original and three copies each of the Field Team's Reports on Examination of the Drew's Lake and Littleton Properties.

W. T. Millar

Enclosures

WTM:rwa

copies for Mr. Selfridge
DMEA Files - 2

Reviewed by
DMEA OPERATING COMMITTEE
10-27-54
(date)

Defense Materials Administration
RECEIVED
OCT 22 1954

Field Team Report on Examination of Property

by
H. L. Burmeister and John B. Hanley 1/

DMEA Docket No. 3429 - (Molybdenum-Copper-Uranium-Tungsten)
Thomites and Chapman, 84 State Street, Boston 9, Mass.
Property: Littleton Property, Aroostook County, Maine

Summary

The purpose of this application is to explore for additional reserves of strategic molybdenum, copper, uranium and tungsten by trenching and diamond core drilling.

Conforming with a request by the Operating Committee for a field examination of the deposit the Field Team representatives conducted this examination on September 16, 1954.

The present workings which consist of four rock pits and one bulldozer trench were all examined. Pits, trenches, dumps, outcrops and adjacent swamp area were scanned with a Geiger counter and a scintillator with negative results. The ultra-violet light revealed no scheelite in chip samples taken from the pit walls and excavated material. No more than could be considered a trace of any strategic material was found.

Conclusions

Examination of all available workings and outcrops result in the conclusion that this property contains strategic materials in quantities too small to justify further exploration.

Recommendations

Due to the above conclusions, the Field Team recommends that this application be denied.

1/ H. L. Burmeister, Engineer, Bureau of Mines.
John B. Hanley, Geologist, Geological Survey.

Declassified by
DMA CONTRACTING COMMAND
10-27-54
(Date)

Time Spent on Property

Four hours were spent on the deposit in the course of the examination. The Field Team representatives were accompanied by the applicants, Mr. Thwaites and Mr. Chapman.

Size and Location of Property (Fig. 3)

The Littleton Property, also known as the Henderson Molybdenum Prospect, is located in N. Lat. 46°12½' and W. Long. 67°47½', and is reached from Houlton, Maine, by proceeding eastward on Route US 2 for a distance of approximately 1 mile to its junction with Foxcroft Road. Proceed northward on Foxcroft Road a distance of 5.4 miles to a farm road on the east. The trenches examined lie about 200 yards north of the farmhouse with a swamp-covered area extending north of the trenches.

Competency of Applicant

Mr. Thwaites has done considerable prospecting in the area but it is judged that neither he nor Mr. Chapman have had actual mining experience.

Property Rights

This property which has also been called the Henderson Molybdenum Prospect, consists of approximately 210 acres which is a portion of the farm owned by C. A. Henderson. The applicants have an option on the 210 acre area.

Description of Property

The area north of the farmhouse on which three of the pits are located consists of nearly level grassland. The three pits are embraced in a space not to exceed 150 feet in diameter. A fourth pit is located in second growth timberland, about 150 yards northeasterly of the group of three pits. The area northeast and northwest of this fourth pit consists of wooded swamp.

Geology

The geology of this property is well described in the memorandum reports by Burbank and by Miller. The only new work consists of two small pits south and southeast of the northwest trenches shown on Burbank's map and a bulldozer trench along an old road to the east of the molybdenite trench in the woodlot. The new work has exposed no richer mineral content than that in the old trenches and the bulldozer trench exposed only unmineralized limestone. The southern trench exposed a band of limestone breccia at least 6 inches thick, but this breccia contained no more molybdenite, pyrite, or chalcopyrite than the massive limestone.

All trenches and pits and the granite outcrops around the swamp were scanned with a Geiger counter and a scintillator. No high readings that could be duplicated were found, and most of the measurements were within the background range, which was very erratic during the course of the examination. The walls of two of the trenches could not be checked because the openings were flooded, but the dump material from these trenches was carefully scanned with negative results.

Samples of possible tungsten-bearing material were collected and later checked with ultra-violet light. No scheelite was found.

Samples taken by W. S. Burbank showed that the overall molybdenum content of the richest trench was less than 0.5 percent, and that copper and tungsten were present only as traces. A selected sample of the richest rock in this property as reported to Burbank by Harry H. Briggs contained 1.60 percent molybdenum and 0.07 percent copper.

Ore Reserves

The low content of molybdenite, chalcopyrite, and other sulfide minerals, the absence of scheelite, and the negative results of the radio-

metric scanning of the property make any estimate of ore reserves unnecessary.

Description of Past Operations

From observations during this examination it is evident that no mining operations have been conducted on this property. Government files discloses no record of production

Availability of Manpower, Equipment and Supplies

There are no local miners. A drill and portable compressor can be rented in Houlton, Maine. Manufacturers of mining equipment have sales representatives in Portland, Maine.

Applicant's Proposal

The applicant proposed to explore this area by trenching and diamond core drilling for strategic molybdenum, copper, uranium and tungsten. The combined cost of exploring both the Littleton and Drew's Lake properties was submitted by the applicant as $41,000.00.

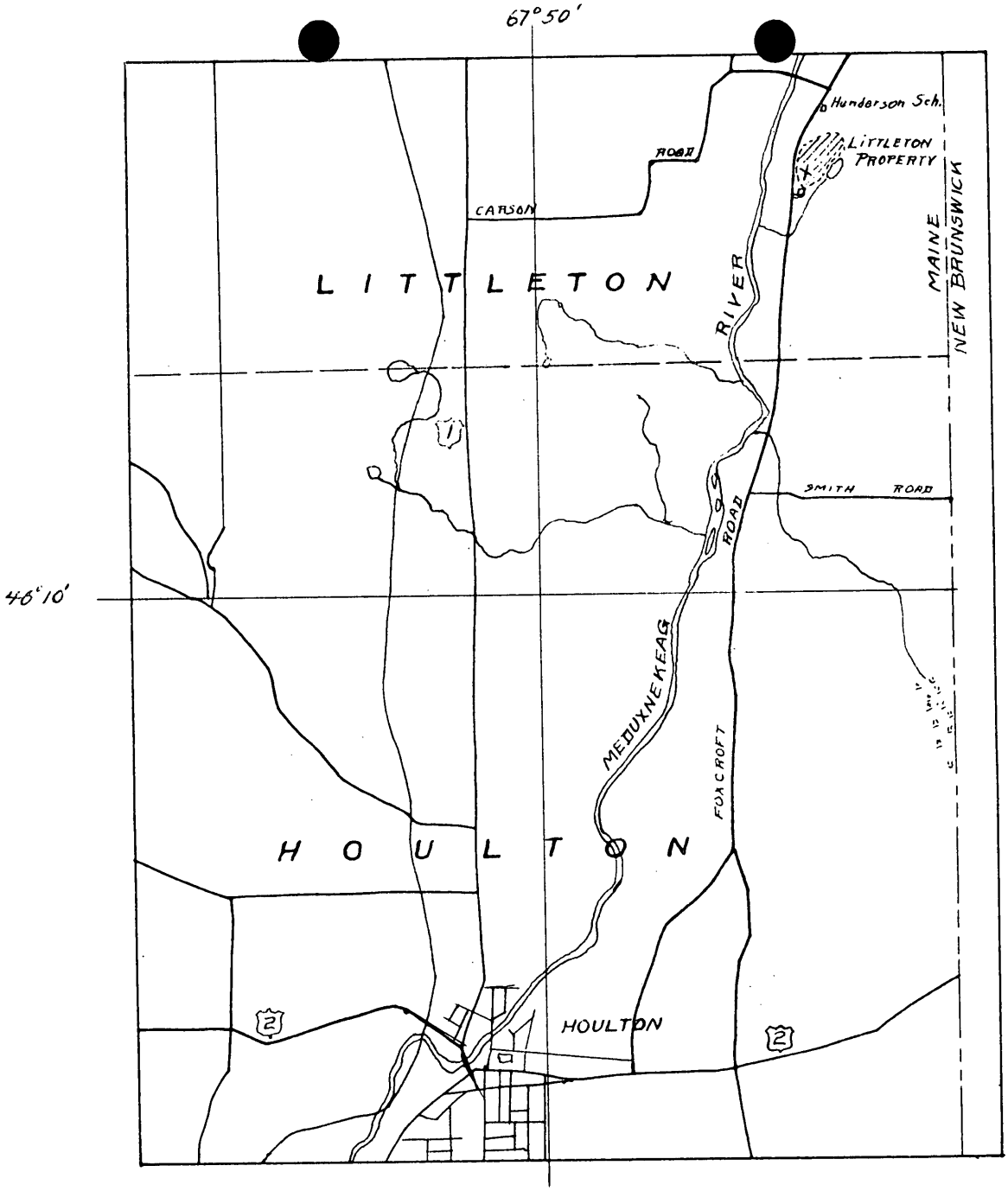
W. T. Millar

W. T. Millar, Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII

(for) F. K. Lewis

Quentin D. Singewald, U. S. Geological
Survey Member, Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII

College Park, Md.
October 14, 1954



LITTLETON PROPERTY
AROOSTOOK COUNTY, ME.

DOCKET DMEA 3429

U.S.G.S. HOULTON QUADRANGLE
U.S.B.M. 7½'. SEPT. 1954

0 inches 1
0 miles 1

FIG. 3

Defense Materials Administration
RECEIVED
OCT 22 1954

Field Team Report on Examination of Property

by

H. L. Burmeister and John B. Hanley 1/

DMEA Docket No. 3429 - (Copper-Tungsten-Lead-Zinc)
Thwaites and Chapman, 84 State Street, Boston 9, Mass.
Property: Drew's Lake Property, Aroostook County, Maine

Summary

The subject docket is an application for Government assistance in exploring for strategic copper, tungsten, lead and zinc by trenching and core drilling.

This application was referred to the DMEA Field Team for a field examination to determine the justification of the proposed exploratory work. For this purpose representatives of the Bureau-Survey Field Team examined the deposit on September 16, 1954 in company with the applicants, Mr. Harry A. Thwaites and Mr. John V. Chapman.

Exploration as outlined in the application consists of bulldozing the overburden, blasting rock trenches across the shear zone and diamond core drilling. The total cost of this program and the Littleton project was submitted as $41,000.00.

Mineralization in this area is confined to a shear zone in granite-syenite which contains a network of quartz veinlets. Three existing rock pits were examined, two of which were chip sampled, the other of which was filled with water and inaccessible. Material excavated from this flooded pit was examined but no ore minerals were observed. The chip samples from the first two pits were examined in ultra-violet light and afterward the pits were

1/ H. L. Burmeister, Engineer, Bureau of Mines.
John B. Hanley, Geologist, Geological Survey.

examined under the light at night. The area to the south of the pits was examined for an extension of the shear zone but no indications of continuity were found.

Conclusions

Based on the data compiled during this examination, it is concluded that there are insufficient concentrations of strategic minerals to justify further exploration.

Recommendations

On the grounds of insufficient content of strategic minerals and the unfavorable geologic conditions for the occurrence of richer concentrations, the Field Team recommends that the Government deny this application.

Time Spent on Property

The Field Team representatives spent four daylight hours and three hours after dark examining this property. They were accompanied by the applicants, Mr. Harry A. Thornton and Mr. John V. Chapman.

Name and Location of Property (Fig. 1 and 2)

The Dean's Lake Property is located in the Town of Linneus, Aroostook County, Maine; N. Lat. 46°05'30" and W. Long. 68°00'30". It is reached by proceeding westward from Houlton, Maine, on Route US 2 approximately 5.6 miles to the intersection of New Limerick Road. Proceed south to New Limerick, then turn west and proceed for approximately 1.4 miles to new School; thence proceed south 0.6 mile to gravel road on right; then follow the gravel road 0.4 mile to the shore of Mechumchemeg Lake; cross the bridge over the lake outlet and follow a bulldozed trail south about 0.3 mile to the open workings. All roads except the bulldozed trail are passable throughout the year.

Competency of Applicant

Mr. Chapman indicates that he has had no mining experience. Mr. Tisaites has prospected in this area for 5 to 10 years but as far as known has no further mining experience.

Property Rights

All the property covered by this application is owned by Mr. Roy Brassoombe, Oakfield, Maine, and is under option to the applicants.

Description of Property

The entire optioned property consists of 900 acres. Only the northern portion containing approximately 200 acres and lying entirely on the western slope of Drew Hill, has been represented as containing mineralization. For this reason Fig. 2 includes only the 200 acre area.

Lots "A" and "B" are quite heavily wooded, the overburden ranging from 1 to 6 feet deep. Access to these lots by four wheel drive vehicles may be had by turning westward from Linneus Road onto a logging road at a point 50 feet south of where Linneus Road crosses Meduxnekeag Stream.

Prospecting work on this property consists of two accessible pits and one which is flooded. To the southeast of pit No. 2 an area has been bulldozed to bedrock but shows no evidence of a shear zone or mineralization.

Geology

The country rock in the Drew's Lake property is a granite-syenite rock that intrudes the phyllite underlying Drew Hill. The contact between the granite and the phyllite is a few hundred yards to the east of the shear zone exposed in Pits No. 1 and No. 2. The contact appears to trend almost due north with small offshoots of the igneous rock cutting across the foliation of the phyllite.

The shear zone, as exposed in Pits No. 1 and No. 2, and as reported in Pit "A", is entirely in the granite-syenite. The surface expression of the zone is a bench along the west side of the hill. This bench is more or less parallel to the shore line of Nedumokog Lake, but approaches the lake shore to the south of the explored area. North of Pit "A" the shear zone appears to bend toward the east and to cross the contact between the granite rock and the phyllite on the Barnes property. As traced easterly the shear zone extends to the No. 1 vein on the Barnes property, where it trends almost due east.

At the time of the examination the small trench in the bedrock in Pit "A" was completely under running water and could not be seen. According to Mr. Thwaites, this trench had just uncovered the footwall of the shear zone when work had to be stopped because of the torrential rains of the September 11 hurricane. The material excavated from this trench was highly fractured granitic rock thus confirming Mr. Thwaites' observations.

A trench 6 feet deep in the bedrock in Pit No. 1 on the west side of the logging road exposes an intricate network of quartz veins adjacent to the hanging wall of the shear zone. Although the shear zone appears to be 15 to 18 feet wide in this pit, the maximum width of the network of quartz veins is 10 feet at the surface of the bedrock and decreases to about 4 feet at the bottom of the trench. The hanging wall of the network of quartz veins dips 55 to 60° S.E., and the probable footwall dips 35° S.E. near the the top of the trench and increases in steepness toward the bottom of the trench where it is practically parallel to the attitude of the hanging wall. The quartz veins in the network range from 2 to 12 inches in thickness, and surround blocks of fractured country rock. Both the vein quartz and the

country rock are highly fractured, and the surfaces of most all fractures are coated with limonite stains.

The quartz veins in this trench contain visible sulfide minerals. Pyrite, pyrrhotite, sphalerite, and galena are most abundant near the margins of the quartz; less abundant or absent in the central parts of the veins. The average grade of these sulfides is too low to be ore, and no minable concentration of any sulfide minerals was seen. Examination of a chip sample collected horizontally across the network of quartz veins about one foot below the rim of the north wall of the trench by Mr. Burmeister revealed no significant content of sulfide minerals and, under ultra-violet light, considerably less than 0.5 percent scheelite, most of which was a film coating the fracture planes in the quartz. When the trench was examined under ultra-violet light the scheelite was seen to be most abundant near the hanging wall of the shear zone, and to decrease rapidly in abundance away from the hanging wall through a 6-foot width, moreover it occurs chiefly as a film on the fracture planes in quartz and only rarely as solid masses in the quartz. The scheelite content in the network was visually estimated to be less than 0.1 percent.

Neither the shear zone or the quartz veins are exposed between Pit "A" and Pit No. 1, (see Fig. 2), a distance of about 175 feet. In addition, neither was seen at any place in the 300-foot distance between Pit No. 1 and Pit No. 2.

A small trench just south of Pit No. 2 exposes several feet of the shear zone on the west side of a slightly fractured quartz vein. The lower, western part of the pit in the sheared granitic rock was filled with water and could not be closely examined. The upper, eastern part that exposed the

quartz vein was accessible, but showed that the quartz vein contained the bulk of the sulfide minerals. In this trench the quartz vein splits into two branches, the western one of which is about 14 inches thick; the eastern about 6 inches thick. These veins are separated by altered and sheared country rock approximately 18 inches thick. At the deepest place in the western part of this trench the quartz vein dips steeply to the southeast. Where the eastern part of the trench begins, however, the dip is reversed and is gentle to the northwest. The quartz vein branches where the reversal in dip was observed. A few feet to the east both quartz veins are flat-lying, and beyond this at the eastern end of the trench, a horizontal distance of about 3 feet, the dip of both quartz veins is gentle to the southeast. The western quartz vein contains more visible sulfide minerals than the eastern vein, and the sulfide minerals are concentrated in the quartz adjacent to the contact between the country rock and the vein, although a minor concentration occurs at spots in the medial part of the vein. A chip sample of this vein collected by Mr. Burmeister showed a distinctly lower content of scheelite than the sample from Pit No. 1. This agreed with Mr. Thwaites' impression that Pit No. 2 was not as rich as Pit No. 1. When this trench was examined by ultra-violet light much the same relationships were found as in Pit No. 1 except that the scheelite content was markedly less than in Pit No. 1.

These facts were checked in Pit No. 2 where a quartz vein about 12 inches thick and two thin veins were exposed. A small area about 1,200 feet southwest of Pit No. 1 along the shear zone, as traced on the basis of quartz float by Mr. Thwaites, has been bulldozed. No shear zone or quartz vein was uncovered by this work, although the granitic rock was well exposed.

According to Mr. Thomites the shear zone can be traced for about half a mile in total length by quartz float. A quick traverse southeast of Pit No. 2 to the logging road showed the quartz float to be scarce and widely scattered along the probable trend of the shear zone. The return traverse along the logging road, which offered excellent exposures of the bedrock as the result of the recent rains, disclosed no quartz veins or any sheared rock, particularly upslope above the last pieces of quartz float. Consequently, any extension of the shear zone southeast of Pit No. 2 is not warranted by the present knowledge of the geology.

Ore Reserves

The low content of scheelite, estimated to be less than 0.1 of 1 percent in the richest exposure, and of the sulfide minerals, and the thinness of the mineral-bearing rock make any estimate of ore reserves unnecessary. Insufficient prospecting has been done on the property to provide a reasonable basis for estimating ore resources, even if the scheelite and other sulfide minerals had occurred in minable concentrations, as they do not.

Description of Past Operations

The applicant did not claim any past production and the Government files disclose no record of production. The several prospect pits examined are the only workings on the property and could not have produced any appreciable tonnage of ore.

Availability of Manpower, Equipment, Supplies

As mining is not active in this area, miners would have to be imported or local men trained. A jackhammer and portable air compressor can be rented in Houlton. Representatives of mining equipment manufacturing firms are located in Portland, Maine and Boston, Massachusetts.

Applicant's Proposal

The applicant proposed to trench and diamond core drill the area to explore for strategic copper, tungsten, lead and zinc. The combined cost of the Drew's Lake and Littleton property explorations was submitted in the application as $11,000.00.

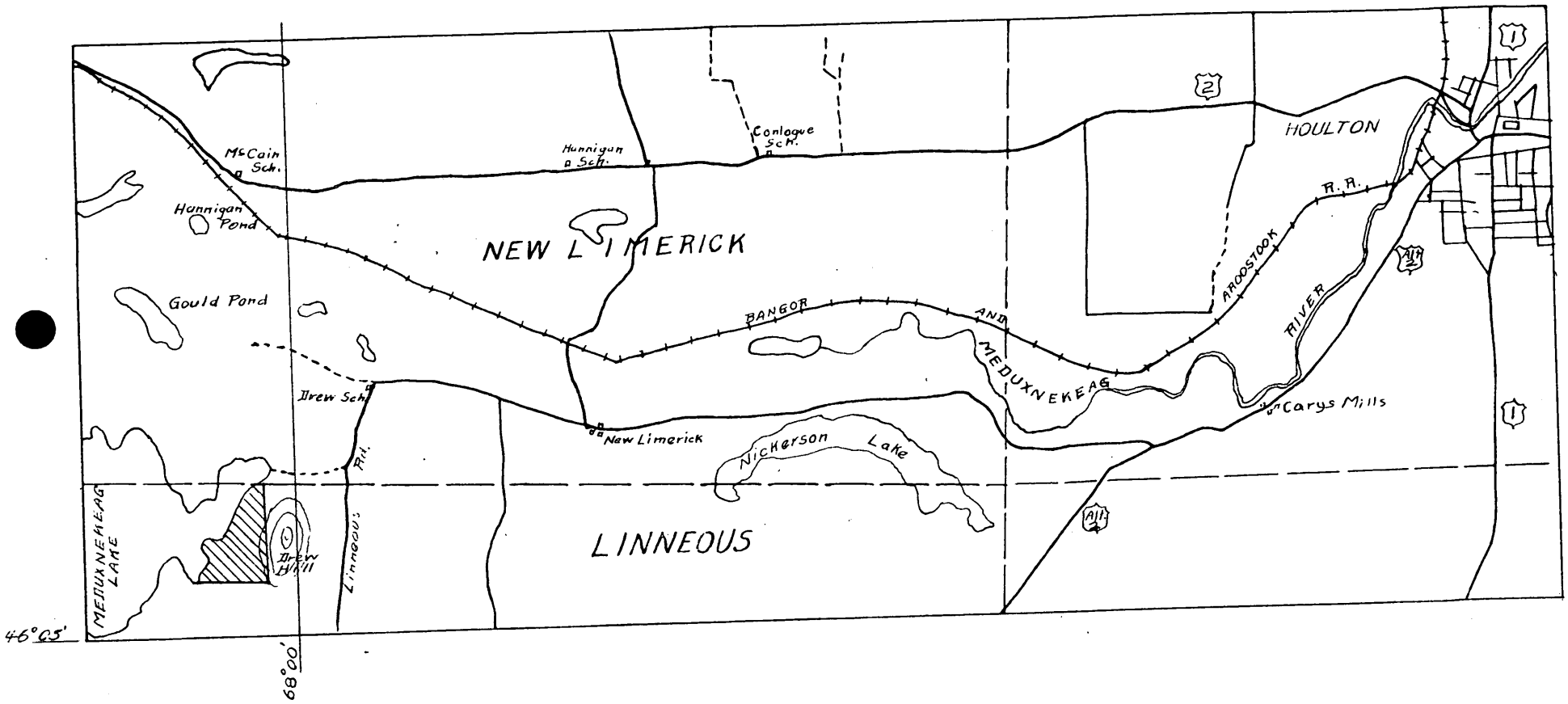
W. T. Miller

W. T. Miller, Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII

(for) K. Lewis

Quentin H. Singewald, U. S. Geological
Survey Member, Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII

College Park, Md.
October 14, 1954



DREWS LAKE PROPERTY
AROOSTOOK COUNTY, ME.

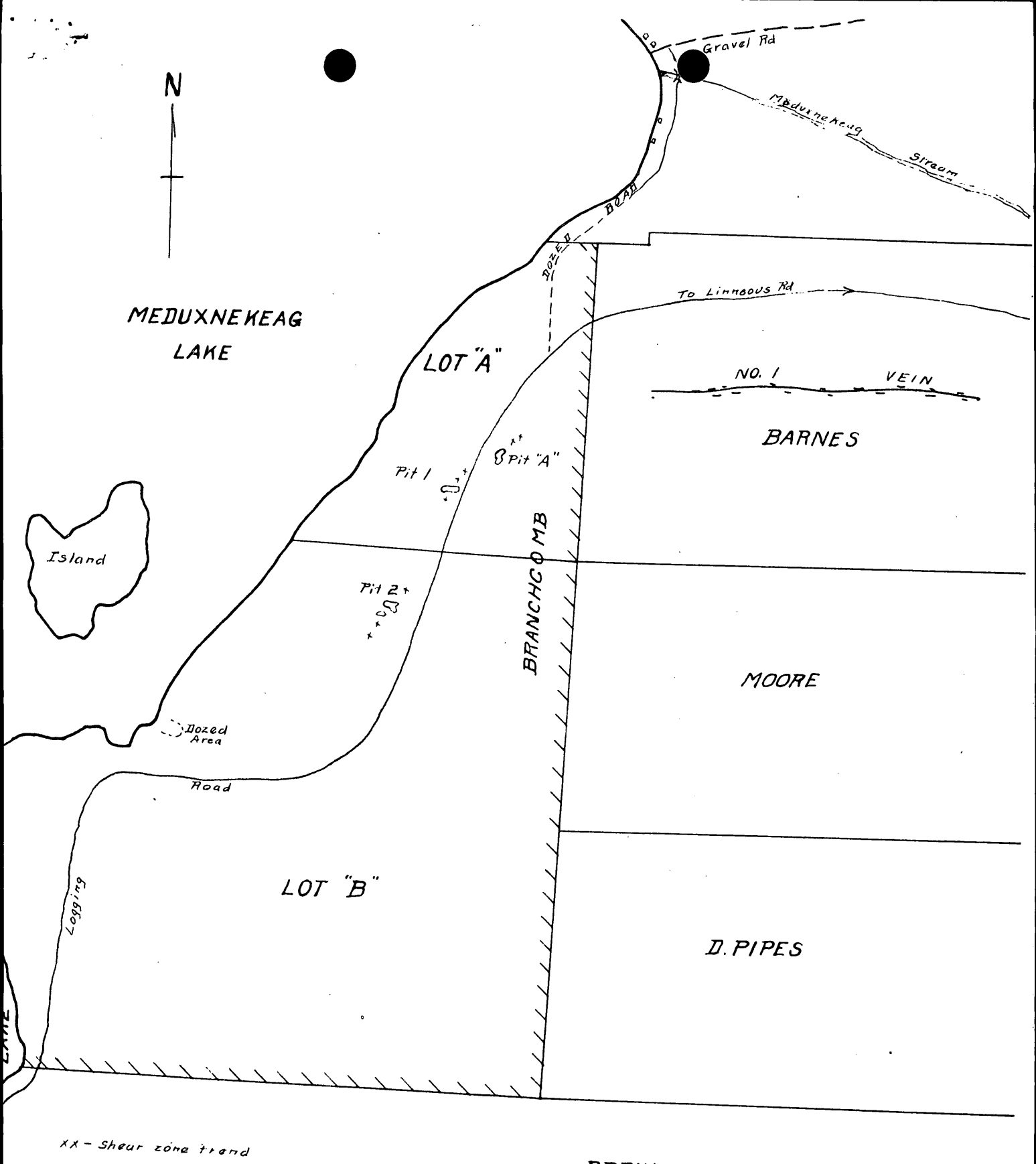
DOCKET DMEA 3429

U.S.G.S. HOULTON QUADRANGLE

U.S.B.M. SEPT. 1954

0 inches 1
miles

FIG. 1



DREWS LAKE PROPERTY
AROOSTOOK COUNTY, ME.
DOCKET DMEA 3429
U.S.B.M. ~~7413~~
SEPT. 1954

0 inches 1
0 feet 350

FIG. 2

402

College Park, Maryland

September 8, 1954

Mr. John V. Chapman
Room 532, 84 State Street
Boston 9, Massachusetts

Subject: Docket No. DMEA-3429

Dear Mr. Chapman:

This will advise that Mr. H. L. Burmeister of the Bureau of Mines and Mr. J. B. Hanley of the Geological Survey, plan to be in Houlton, Maine, on September 15, 1954 for the purpose of examining the Drew's Lake and Littleton properties in connection with your application for DMEA assistance.

Please plan to meet them about noon in the lobby of the hotel across the street from the Post Office.

It is suggested that you bring with you any maps, assay results or other data relative to these properties.

Very truly yours,

N. A. Hilertson, Acting for
W. T. Millar, Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII

NAE:HLBurmeister:rwa

copies for GeoCSelfridge
JBHanley, USGS
DMEA Files - 2

400

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 1 1954

August 30, 1954

WSM

Mr. John V. Chapman
Thwaites and Chapman
84 State Street, Room 532
Boston 9, Massachusetts

Re: Docket No. DMEA-3429 - Tungsten, Copper, Lead, Zinc and Uranium.
Brew's Lake & Littleton Properties
Aroostook County, Maine

Dear Mr. Chapman:

This acknowledges receipt of your letter dated August 24, and additional information to accompany your application.

An examination of the deposit is being scheduled for the week of September 13. You will be advised the date the engineers are prepared to conduct the field work.

Very truly yours,

W. T. Millar, Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII

WTM:rwa

copies for GeoCSelfridge
QDSingewald, USGS
HLBurmeister, Eng.
DMEA Files, CP

COPY

August 24, 1954

Mr. W. T. Millar
Executive Officer
DMEA Field Team
Region VIII, U. S. Bureau of Mines
College Park, Md.

Re: Docket No. DMEA 3429 - Tungsten, Copper, Lead, Zinc & Uranium
Drew's Lake & Littleton Properties
Aroostook County, Maine

Dear Mr. Millar:

I am enclosing estimated cost of proposed work at Drew's Lake and Littleton properties in Aroostook County, Maine.

All the maps and sketches that I had I forwarded with the original application.

I am enclosing Houk's report on the old property, you will notice on property map # 1 of Houks report, I have marked off with red lines the new property and the approximate location of the vein, my partner Thwaites has located two new cross veins on the west side of the Barnes lot. I am also enclosing two recent letters and our latest assay certificate of a sample taken out of our # 1 trench of the new property.

I had Mr. Holt of the Bureau of Mines office here in Boston check my cost estimate, and he suggested that I send Houks old report to you too; if this report is of no value to you, will ypu please send it back to me as soon as possible.

If it is possible would you be kind enough to advise me when your examination can be scheduled, then I can arrange my time so that I can be on the property when they are there.

I am sending along a copy of Mr. Mittendorf's letter.

Sincerely yours,

/s/ John V. Chapman
John V. Chapman

JVC/yec

COPY

ESTIMATED COST OF PROPOSED WORK
AT
DREWS LAKE

TRENCHING	
Labor - 60- 8 hour days 3 men - 1640 man hours	
1640 man hrs. @ $1.00 per Hr.	$1640.00
BULLDOZING	
500 hrs. @ $10.00 hour	$5000.00
SAMPLING & ASSAYING	$2000.00
DIAMOND DRILLING	
10,000 ft. @ approx. $3.00 per foot	$30,000.00
COMPRESSOR	
480 hrs. @ $4.00 per hr.	$1920.00
DYANMITE ETC.	$440.00
TOTAL	$41,000.00

By John V. Chapman
Thwaites & Chapman

This estimate based on 2 to 3 months work.
JVC

AUG 20 1954

Mr. John V. Chapman
Thesites and Chapman
84 State Street, Room 532
Boston 9, Massachusetts

Re: Docket No. DMEA 3429 - Tungsten, Copper, Lead, Zinc, and Uranium
Drew's Lake & Littleton Properties
Aroostook County, Maine

Dear Mr. Chapman:

Reference is made to your application for exploration assistance.

Before consideration can be given an application, it is necessary for the applicant to submit a program outlining the work desired. This need not be elaborate and detailed; pencil sketches are acceptable. Such programs can be modified at any time prior to an actual contract and contracts have provision for modification after a project is started. The engineers and geologists of the DMEA field team examining a mineral deposit often make suggestions regarding modifications.

Results of drilling and other exploration should be submitted for our consideration at this time. If you do not have reports but know where they can be obtained or inspected, this information will be appreciated.

We realize that time is of the essence if any exploration is to be accomplished this summer. Therefore, it is suggested that you prepare and submit a supplement to your application listing the work proposed, the approximate cost, the location of proposed work, and providing any technical information possible.

The field team will be informed that an application is expected so that an early examination can be scheduled. If an engineer or geologist will be in the immediate area prior to the arrival of your supplemental application, authorization will be given to inspect the deposits. In such case, you may hear from W. T. Millar, Executive Officer, DMEA Field Team, Region VIII, U. S. Bureau of Mines, College Park, Maryland.

Sincerely yours,

C. O. Mittendorf

Administrator

GEEHAN/MARTIN/foc
8-19-54
cc to: Docket
Code 400
Adm. Reading File
Operating Comm.
FT. Reg. 8
R. W. Geehan, USBM
E. L. Newcomb, USGS

Mr. W. T. Millar, Executive Officer
DMEA Field Team, Region VIII
Bureau of Mines
Eastern Experiment Station
College Park, Maryland

Re: Docket No. DMEA 3429 - Tungsten,
Copper, Lead, Zinc, & Uranium
Thwaites and Chapman
Drew's Lake & Littleton Properties
Aroostook County, Maine

Dear Mr. Millar:

Enclosed are two copies of a letter to Mr. John V. Chapman in regard to the above-docketed application for exploration assistance.

It will be appreciated if you will give Mr. Chapman assistance in preparing the required supplemental application. However to expedite processing the application, a field examination of the property may be made prior to the receipt of the requested data if you have an engineer or geologist in the immediate area.

Two copies of a relevant memorandum dated August 12, 1954, by R. P. Trace, Geological Survey, and two copies each of memoranda dated August 16 and August 17, by Robert W. Geehan, Bureau of Mines, are enclosed for your information.

Sincerely yours,

W. S. Martin

ACTING Chairman, Operating Committee

Enclosure

APPROVED:

J. H. Hedges

Member, Bureau of Mines

D. M. Larrabee

Member, Geological Survey

FARutledge:foc
8-19-54
cc to: Docket
Code 400
Adm. Reading File
Operating Comm.
FT. Reg. 8
R. W. Geehan, USBM
E. L. Newcomb, USGS

400

FILE COPY
Surname:

Geehan
Farrabee

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON 25, D. C.

August 17, 1954

Memorandum

To: W. S. Martin, DMEA, Room 3538

From: Robert W. Geehan

Subject: DMEA 3429 - Tungsten, et al
Thwaites and Chapman

Attached is a rough draft of a letter to Mr. Chapman regarding his proposal, for consideration in place of the present letter.

Mr. Chapman will obviously need to employ an engineer to supervise any work; it would seem that he might well do so at this time.

At the very least, he should provide some idea as to what, where, and how much work he proposes. As it now stands the field team would be required to pass on an unknown proposal or to draft a proposal and then pass judgment on it.

/s/ Robert W. Geehan

Robert W. Geehan

Attachment

RWGeehan:lds
Copy to: Files
Ferrous Metals
RWGeehan

400

Mr. W. T. Millar, Executive Officer
DMEA Field Team, Region VIII
Bureau of Mines
Eastern Experiment Station
College Park, Maryland

Re: Docket No. DMEA 3429 - Tungsten,
Copper, Lead, Zinc, & Uranium
Thwaites and Chapman
Drew's Lake & Littleton Properties
Aroostook County, Maine

Dear Mr. Millar:

The above-docketed application for exploration assistance is being referred to your office for a field examination of the property.

Normally in the case of such an incomplete application, we would have requested the applicant to furnish more information before referring the docket to the Field Team for an examination of the property. In the present case, however, as it was felt such a request would engender little additional data and a field examination should be expedited if exploration is warranted and is to be accomplished this summer, we have not asked the applicant for additional data.

Two copies of a relevant memorandum dated August 12, 1954, by R. D. Trace, Geological Survey, are enclosed for your information.

Sincerely yours,

Chairman, Operating Committee

Enclosures

cc: DOCKET
FIELD TEAM, REG. 8
CODE 400
ADM. READING FILE
OPERATING COMMITTEE
R. W. GEEHAN, USBM
E. L. NEWCOMB, USGS

APPROVED:

Member, Bureau of Mines

Member, Geological Survey

FARutledge/ls
8-16-54

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

Mr. John V. Chapman
Thwaites and Chapman
84 State Street, Room 532
Boston 9, Massachusetts

Re: Docket No. DMEA 3429 - Tungsten, Copper, Lead, Zinc, & Uranium
Drew's Lake & Littleton Properties
Aroostook County, Maine

Dear Mr. Chapman:

Reference is made to your phone call of August 11, 1954, to Mr. Lawrence G. Houk, and to your application for exploration assistance in exploring for tungsten, copper, lead, zinc, and uranium, on the above-named properties.

The above-docketed application for exploration assistance has been reviewed by the Iron and Ferro-Alloys Division of the Defense Minerals Exploration Administration and referred to Mr. W. T. Millar, Executive Officer, DMEA Field Team, Region VIII, Bureau of Mines, Eastern Experiment Station, College Park, Maryland, for a field examination of the property. Any assistance that you can render the members of the Field Team will be appreciated.

Your application for exploration assistance was incomplete in many respects. Normally we would have requested that additional data be furnished to this Administration before scheduling a field examination. However, it was determined in the present case that a field examination should be expedited if exploration is to be considered for this season.

We understand that the Drew's Lake property has previously been explored by two diamond drill programs. The results of these, and any other past exploration projects of which you have knowledge, should be submitted for our consideration. Include any geologic or engineering reports, assay maps, or other technologic information you may have, indicating on each whether you require its return.

Sincerely yours,

Administrator

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

Mr. W. T. Millar, Executive Officer
DMEA Field Team, Region VIII
Bureau of Mines
Eastern Experiment Station
College Park, Maryland

Re: Docket No. DMEA 3429 - Tungsten, Copper, Lead, Zinc, & Uranium
Thwaites and Chapman
Drew's Lake & Littleton Properties
Aroostook County, Maine

Dear Mr. Millar:

The above-docketed application for exploration assistance is being referred to your office for a field examination of the property.

Normally in the case of such an incomplete application, we would have requested the applicant to furnish more information before referring the docket to the Field Team for an examination of the property. In the present case, however, as it was felt such a request would engender little additional data and a field examination should be expedited if exploration is warranted and is to be accomplished this summer, we have not asked the applicant for additional data.

Two copies of a relevant memorandum dated August 12, 1954, by R. D. Trace, Geological Survey, are enclosed for your information.

Sincerely yours,

Chairman, Operating Committee

Enclosures

APPROVED:

Member, Bureau of Mines

Member, Geological Survey

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON 25, D. C.

402

August 16, 1954

Memorandum

To: W. S. Martin, DMEA, Room 3538

From: Robert W. Geehan

Subject: DMEA 3429 - Tungsten, lead-zinc, et al.
Thwaites and Chapman

No information is available with regard to previous examinations.

It is suggested that the applicant be requested to furnish maps, assays, and a program.

/s/ Robert W. Geehan

Robert W. Geehan

MF-500

UNITED STA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

REFERENCE SLIP

DATE 8/5/54

REFERRED TO:

1. Mr. Geehan - Rm 3513
2. Mr. Bishop - Rm 3617
3.
4.

FOR:

---- Action	X Recommendation
---- Approval	---- Record of ----
---- Comment	---- Referring to ----
---- Conference	---- Reply for signature of ----
---- Consideration	---- Rewriting
---- Filing	---- Signature
---- Instructions	---- Suggestions
---- Investigation	---- Your information
---- Initials	
---- Mailing	
---- Previous correspondence	

REMARKS: This application is primarily for tungsten and secondarily for lead-zinc. Please address reviews to Mr. Martin, Iron and Ferro Alloys Division.

Check (X) before the items needing attention.

ROBERT E. ADAMS

Initials of sender.

GPO 16—63815-1

This came by messenger.
Mr Johnson's office 8-4-54 3:06

Miller says
he saw the
Dreistate
stuff a few years ago,
and that it appeared
to him to be no
consequence at that
time. He said
he believed Mr. Hook
was consultant for
someone who explored
it later, or maybe
appropriated the crack.
However, unless
Mr. Hook has info that

[illegible]uld make some
other course of action
desirable, I demurred
asking the applicant
to furnish his
complying consents,
then just necessary to
read same and to look.

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Form Approved
Budget Bureau No. 42-R1035.2.

RECEIVED
AUG 3 - 1954

APPLICATION FOR AID IN AN EXPLORATION PROJECT, PURSUANT TO DMEA ORDER 1, UNDER THE DEFENSE PRODUCTION ACT OF 1950, AS AMENDED

Not to be filled in by applicant

Docket No. 3429
Metal or Mineral ~~Copper, et al.~~ Tungsten, Lead-Zinc, et al.
Date Received
Estimated Cost
Participation (Government %)

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address: Thwaites and Chapman
84 State Street
Boston 9, Mass.
Room 532

John V. Chapman
84 State St. Boston 9, Mass.
Harry A. Thwaites
Houlton, Maine

(*b*) If other than an individual, add to your name above whether a corporation, partnership, etc., and the name of the State in which incorporated or otherwise organized.

(*c*) If a corporation, add to above statement, titles, names and addresses of officers.

(*d*) If a partnership, add to the above statement the names and addresses of all partners.

2. *General.*—Read DMEA Order 1, "Government Aid in Defense Exploration Projects," before completing this application. Submit this application and all accompanying papers in quadruplicate (four copies), with your name and address on each sheet of the application and on all accompanying papers. Where sufficient space is not provided on the form for all required information, state it on an accompanying paper, with a reference in each case to the instruction to which it refers by number. Comply with all applicable instructions; or, if not applicable, so state. File the application with Defense Minerals Exploration Administration, Department of the Interior, Washington 25, D. C., or with the nearest field executive officer thereof.

3. *Applicant's property rights.*—(*a*) State the legal description of the land upon which you wish to explore, including all land which you possess or control that may be benefited by the exploration, and excluding any land or interest in land which is not to be included in the exploration project contract Town lot #11 R.R. in the town of New Limerick, Aroostook County, Maine - Lots A, B, 1, 2, 3, in the 10th, range of lots - Lots 1, 2, & 3 in the 11th range lots # 4 range 10 lots # 4 & 5 Range 11 in the Town of Linnous, Aroostook County, Maine. Lot # 7 Range 2 Littleton, Aroostook Co. Maine.

(*b*) State any mine name by which the property is known.

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise Options

(*d*) If you are not the owner, submit with this application a copy of the lease, contract, or other document under which you control the property.

(*e*) If you own the land, describe any liens or encumbrances on it

(*f*) If the land consists of unpatented claims, add to the description above, the book and page numbers for each recorded location notice.

See note attached

4. *Physical description.*—(*a*) Describe in detail any mining or exploration operations which have been or now are being conducted upon the land, including existing mine workings and production facilities. State your interest, if any, in such operations. Also describe accessibility of mine workings for examination purposes.

(*b*) State past and current production, and ore reserves, if any, giving quantities and grades.

(*c*) Describe the geologic features of the property, including mineralization, type of deposit (vein, bedded, etc.), and your reasons for wishing to explore. Illustrate with maps or sketches. Send with your application (but not necessarily as a part of it) any geologic or engineering report, assay maps, or other technologic information you may have, indicating on each whether you require its return to you.

(*d*) State the facts with respect to the accessibility of the project: Access roads, distances to shipping, supply and residence points. 6 miles out of Houlton, Me. Hard surface road, 2½ miles from R. R.

(*e*) State the availability of manpower, materials, supplies, equipment, water, and power.

Water 200 ft. from property to Lake.
Electric Power within 1000 ft.

16—66551-1

5. *The exploration project.*—(*a*) State the mineral or minerals for which you wish to explore Copper - Silver Lead, Zinc, Tungsten and Uranium

(*b*) Describe fully the proposed work, including a map or sketch of the property showing a plan (and cross sections if needed) of any present mine workings, and the location of the proposed exploration work as related to such features as contacts, veins, ore-bearing beds, etc.

(*c*) The work will start within ..... days and be completed within ..... months from the date of an exploration project contract.

(*d*) State the operating experience and background of the applicant with relation to the ability to carry out such exploration project, and also that of the person or persons who will supervise the operations.

6. *Estimate of costs.*—Furnish a detailed estimate of the costs of the proposed work (you will have to use a separate sheet), under the following headings. Add the totals under all headings to give the estimated total cost of the project:

(*a*) *Independent contracts.*—(Note.—If the applicant does not intend to let any of the work to contractors, write "none" after this item. To the extent that the work is to be contracted, do not repeat the cost of the contract-work in subsequent items.) State the cost of any proposed independent contracts for the performance of all or any part of the work, expressed in terms of units of work (such as per foot of drilling, per foot of drifting, per hour of bulldozer operations, per cubic yard of material moved, etc.).

(*b*) *Labor, supervision, consultants.*—Include an itemized schedule of numbers, classes and rates of wages, salaries or fees for necessary labor, supervision and engineering and geological consultants.

(*c*) *Operating materials and supplies.*—Furnish an itemized list, including items of equipment costing less than $50 each, and power, water and fuel.

(*d*) *Operating equipment.*—Furnish an itemized list of any operating equipment to be rented, purchased, or which is owned and will be furnished by the Operator, with the estimated rental, purchase price, or suggested use-allowance based on present value, as the case may be.

(*e*) *Rehabilitation and repairs.*—Furnish a detailed list showing the cost of any necessary initial rehabilitation or repairs of existing buildings, installations, fixtures, and movable operating equipment, now owned by the Operator and which will be devoted to the exploration project.

(*f*) *New buildings, improvements, installations.*—Furnish a detailed list showing the cost of any necessary buildings, fixed improvements, or installations to be purchased, installed or constructed for the benefit of the exploration project.

(*g*) *Miscellaneous.*—Furnish a detailed list showing the cost of repairs to and maintenance of operating equipment (not including initial rehabilitation or repairs of the Operator's equipment), analytical work, accounting, workmen's compensation and employers' liability insurance, and payroll taxes.

(*h*) *Contingencies.*—Give an estimate of any necessary allowances for contingencies not included in the costs stated above.

NOTE.—No items of general overhead, corporate management, interest, taxes (other than payroll and sales taxes), or any other indirect costs, or work performed or costs incurred before the date of the contract, should be included in the estimate of costs.

7. (*a*) Are you prepared to furnish your share of the cost of the proposed project in accordance with the regulations on Government participation (Sec. 7, DMEA No. 1)?

(*b*) How do you propose to furnish your share of the costs?

[X] Money [ ] Use of equipment owned by you [ ] Other

Explain in detail on acompanying paper.

CERTIFICATION

The undersigned, whether as an individual, corporate officer, partner, or otherwise, both in his own behalf and acting for the applicant, certifies that the information set forth in this form and accompanying papers is correct and complete, to the best of his knowledge and belief.

Dated 8/2, 1954

Thwaites and Chapman
(Applicant)

By John V. Chapman

84 State Street,

Boston 9, Mass.

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

U. S. GOVERNMENT PRINTING OFFICE 16—66551-1

DREW'S LAKE PROPERTY.

(4)PHYSICAL DESCRIPTION. (a)

Property has been prospected by Thwaites during the last year, and orebody has been cross-trenched by means of Bulldozer and blasting over a length of approximately 500 feet. Overburden is deep, in some places eight to ten feet deep. Four trenches have been put across the orebody in the above length of 500 feet, and width of orezone is from 14 to 18 feet (true width). All trenches are open and can be seen anytime.

(c) Orebody is a strong shear in Granite, shot through with quartz veins and veinlets, and was located by means of quartz float, which marks the approximate strike of the shear across the property in a northeast-southwesterly direction for an approximate distance of 3000 feet. The granite continues to the southwest three to four miles further according to the Maine geological map. At the contact on the northeast end of the shear there is considerable Pegmatite showing. The shear is carrying in the quartz the following minerals:- Iron Pyrites, Arsenopyrite, Galena, Zinc Blende, Scheelite, and a few showings of Chalcopyrite. The Zinc Blende with some Scheelite also occurs in the Schist for the full width of the zone. Surface of the zone is very much oxidized to a depth of several feet.

LITTLETON PROPERTY.

(c) Granite-Limestone contact, carrying low Silver, Copper and Molybdenite values over a width of 120 feet and length of 350 feet. Also some good showings of Galena and Zinc Blende. Zone has been opened by Bulldozer abd blasting. Many quarts veinlets cut the limestone some carrying good showings of Chalcopyrite, although most are leached out. Some good showings of Flourite, and some heavy showings of Molybdenite (see assay) some small basic dykes carrying Hornblende also cutting the limestone. Mr. Jack Rabbit of the Bureau of Mines got quite a lot of action on his Geiger Counter in crossing a swamp on this contact about two years ago. Zone is very much oxidized at the surface for the full width and limestone has been crystalized. there is considerable yellow floresence under the lamp on this property, but no assaying has been done as yet for Tungsten.

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

Not used - reported to F.T.

Mr. John V. Chapman
Thwaites and Chapman
84 State Street
Boston, Massachusetts

Re: Docket No. DMEA 3429 - Tungsten, Copper, Lead, Zinc, & Uranium
Drew's Lake & Littleton Properties
Aroostook County, Maine

Dear Mr. Chapman:

Reference is made to your phone call of August 11, 1954, to Mr. Lawrence G. Houk, and to your application for exploration assistance in exploring for tungsten, copper, lead, zinc, and uranium on the above-named properties.

After review by all relevant commodity divisions, we find that the information submitted with your application is insufficient to justify a field examination by the Government. To help us give your application proper consideration, it will be necessary for you to supplement that application by outlining your two proposed exploration programs. Each proposal should be clarified by a map indicating the target of the exploration and showing the location of all existing workings and the samples for which analyses were submitted with your application. Detailed cost estimates for the proposed work should also be submitted.

We understand that the Drew's Lake property has previously been explored by two diamond drill programs. The results of these, and any other past exploration projects of which you have knowledge, should be submitted for our consideration. Include any geologic or engineering reports, assay maps, or other technologic information you may have, indicating on each whether you require its return.

We realize that time is of the essence if any exploration is to be accomplished this summer. Therefore, we believe that Mr. Houk's suggestion of consulting an engineer for assistance in preparing a supplement to your application is excellent. An experienced mining engineer or geologist will understand that what we are asking for is the specific information usually required as a preliminary to a field examination for an exploration project.

Your application will, accordingly, be held in abeyance until the necessary data have been received.

Sincerely yours,

W S Martin

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

IN REPLY REFER TO:

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

400

August 12, 1954

dmea 3429

Memorandum

REVIEW OF APPLICATION DMEA-3429 (copper, et al.)

To: W. R. Griswold, Defense Minerals Exploration Administration
From: R. D. Trace, U. S. Geological Survey
Applicant's name and address: Thwaites and Chapman, 84 State Street, Boston 9, Massachusetts
Name of property: Drew's Lake and Littleton Properties
Location of property: Aroostook County, Maine
Summary of applicant's proposal: None given.
Comments: A) General: 1) The application does not include a program of exploration. 2) Previously known base metal prospects in these areas have not proved economic.

B) The Drew's Lake property: The information given about this property is incomplete and vague. The property has been examined by the Bureau of Mines and by Hanley and Pavlides of the Survey but since then, we understand that the area was explored by 2 different drilling programs. We suggest that the operator be requested to furnish this data before any further consideration be given.

C) Littleton property: We think that this probably is a new discovery and has not been examined by the Survey. The data given in the application is of no help in evaluating the property.

RECOMMENDATION: Request applicant to furnish additional data.

R. D. Trace

RDTrace:hlm
G-8/12/54

Copy to: Director's reading, 4212
Branch reading, 4212
DMEA (3)
Docket file
C. H. Johnson, 3621

400

Area 3429

August 11, 1954

Mr. John Chapman telephoning longdistance to Mr. Houk.

Mr. Chapman: I see I have a docket number. Have you any idea how long it will be before they send a crew up here?

Mr. Houk: That is out of my shop.

Mr. Chapman: I am considering a trip and would like to make plans on how long I can be away as I want to be here for the examination.

Mr. Houk: They generally take two weeks to a month.

Mr. Chapman: You know the conditions up there -- the snow flies.

Mr. Houk: Routine in Washington takes a while.

Mr. Chapman: Anyway you can hurry it up?

Mr. Houk: No. It is outside of my shop and I hesitate to interfere. Where is the tungsten located?

Mr. Chapman: On the trail that goes along the lake. About 15 feet off.

Mr. Houk: Those assays for tungsten were they picked specimens or good samples from the dump?

Mr. Chapman: We were not looking for tungsten and Harry picked up a piece and sent it in and that is what we got back.

Mr. Houk: Have you lamped the area?

Mr. Chapman: Yes. On the refuse heap it was fine then I put a lamp on it and took it to Needleman. He has the samples and they look good to me.
USBM engr detailed to Nyac project

Mr. Houk: Do you have any kind of sample of the entire dump?

Mr. Chapman: This was picked up over the entire dump. I was looking for a good sample of lead-zinc and silver. Then I bought a field lamp - it was too cumbersome. I put the lamp on and found pieces that had plenty in them and some with just spots.

Mr. Houk: How large a sample did you have assayed?

Mr. Chapman: Five pounds. My trouble is that I need a good engineer.

Mr. Houk: You don't waste money by hiring a good consultant.

Mr. Chapman: Yes, I know that. Wish you were up here. Harry says we really have hold of something.
I am putting money into this and I don't want to go away for a vacation if possible to be here for the crew.

Mr. Houk: They will notify you plenty of time in advance. It will probably take two weeks from the time you made your application.

Mr. Chapman: Needleman is very helpful and another man is there too.

Mr. Houk: Holt?

USBM in charge in Boston Phil

Mr. Chapman: Yes I believe that is his name. They looked at the samples and Holt said if it was up to him he would authorize a field examination. He seems to be a pretty shrewd old fellow. He thought the tungsten was pretty good.

Mr. Houk: I think the application will be handled as a tungsten application rather than lead-zinc.

Mr. Chapman: Yes. I thought so too.

Mr. Houk: You put down copper, lead-zinc, tungsten, and if they handle it, it will probably be for tungsten.

Mr. Chapman: I feel this is a good proposition. I made up my mind that I will spend $10,000 on it. Cyprus asked me to cross trench and put a pit down. Then I was talking with Needleman and he suggested that I go to the Government. I think we have a good chance there and if it can be expedited, I would appreciate it.

Mr. Houk: Ok. I will see if we can't hurry it along.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON 25, D. C.

Defense Minerals Administration
RECEIVED
NOV 24 1954

November 23, 1954

Memorandum

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee, Room 4445

From: John E. Crawford, Bureau of Mines Member
Uranium Commodity Committee

Subject: DMEA Docket No. 3429, Thwaites and Chapman, 84 State Street, Boston 9, Massachusetts

I have reviewed the subject report and have discussed it with Joseph O. Hosted, representative of the Atomic Energy Commission.

We concur with the recommendation of the Field Team that the application involved under the subject docket be denied.

The report has been forwarded to Mr. Robert W. Geehan, in accordance with the routing slip, for his appraisal of the molybdenum and tungsten potentialities of the properties.

John E. Crawford
John E. Crawford

400

DOCKET
Surname:

Chapman
Martin
Gehan
Newcomb
Hedges
Selfridge

NOV 5 - 1954

Mr. John V. Chapman
Thwaites and Chapman
84 State Street, Room 532
Boston 9, Massachusetts

Re: Docket No. DMEA 3429
Drew Lake Property - Copper, Tungsten, Lead, Zinc.
Littleton Property - Molybdenum, Copper, Uranium, Tungsten
Aroostook County, Maine

Dear Mr. Chapman:

Your application for aid for an exploration project and other data available to us in Washington relating to the above-noted properties have been carefully reviewed.

Projects approved by the Defense Minerals Exploration Administration must, in its judgment, show definite promise of yielding materials of an acceptable grade in quantities that will significantly improve the mineral supply position for the National Defense.

Careful study of all our information, although noting small amounts of copper, lead, zinc, molybdenum, and tungsten mineralization on your property, indicates to us that the probability of disclosing minable ore reserves by your proposed program is not sufficiently promising to justify Government participation. We regret to advise, therefore, that your application for exploration assistance is denied.

We wish to thank you for your interest in the Defense Minerals Exploration Administration program and for bringing your property to our attention.

Sincerely yours,

C. O. Mittendorf

Administrator

DOCKET
CODE 400
FT, REG. 8
ADM. READ. FILE
OPER. COMM.
R. W. GEEHAN, USBM
THOR KIILSGAARD, USGS

TLChapman/ls
11/3/54

RC.4.

DOCKET
Surname:
Chapman
Martin
Stokes

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

November 3, 1954

MEMORANDUM

To: Administrator, DMEA

From: Iron and Ferro-Alloys Division, DMEA

Subject: Denial of application for exploration assistance in the amount of $41,000.00
Docket No. DMEA 3429
Thwaites and Chapman
Drew Lake property - Copper, Tungsten, Lead, Zinc.
Littleton property - Molybdenum, Copper, Uranium, and Tungsten
Aroostook County, Maine

The denial of the subject application by this Division is based on the following information:

(1) The applicant requested exploration assistance in the amount of $41,000.00 to explore for copper, lead, zinc, molybdenum, tungsten, and uranium, on the Drew Lake property and the Littleton property, Aroostook County, Maine.

(2) The country rock in the Drew Lake property is a granite-syenite which intrudes a phyllite. A shear zone cuts through the granite-syenite a few hundred yards from the phyllite contact. This shear zone shows copper, lead, zinc, silver, and tungsten mineralization, but the grade is too low to be of economic value.

The country rock of the Littleton area is a limestone with a narrow brecciated zone which shows some copper, molybdenum, and tungsten; the results of scanning with a scintillator for radio-activity were negative.

(3) Work on the property consists of a number of shallow pits and trenches. Except for picked samples, the grade of ore is very low.

(4) The Field Team and the commodity divisions of the Geological Survey and the Bureau of Mines recommend that the application be denied.

Chapman/ls
11/3/54

Oper. Comm.
cc: Docket
Code 400
Adm. Read. File

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

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

November 3, 1954

MEMORANDUM

To: Administrator, DMEA

From: Iron and Ferro-Alloys Division, DMEA

Subject: Denial of application for exploration assistance in the amount of $41,000.00
Docket No. DMEA 3429
Thwaites and Chapman
Drew Lake property - Copper, Tungsten, Lead, Zinc.
Littleton property - Molybdenum, Copper, Uranium, and Tungsten
Aroostook County, Maine

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(1) The applicant requested exploration assistance in the amount of $41,000.00 to explore for copper, lead, zinc, molybdenum, tungsten, and uranium, on the Drew Lake property and the Littleton property, Aroostook County, Maine.

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The country rock of the Littleton area is a limestone with a narrow brecciated zone which shows some copper, molybdenum, and tungsten; the results of scanning with a scintillator for radio-activity were negative.

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(4) The Field Team and the commodity divisions of the Geological Survey and the Bureau of Mines recommend that the application be denied.

W S Martin

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

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

IN REPLY REFER TO:

Docket

Defense Minerals Administration
RECEIVED
NOV 2 - 1954

November 1, 1954

Re: DMEA-3429
Thwaites & Chapman
(Drew's Lake and
Littleton Properties)
Aroostook Co., Maine
$41,000

WSM

Memorandum

To: W. S. Martin, Defense Minerals Exploration Administration

From: E. L. Newcomb, U. S. Geological Survey

Subject: Review of Field Team examination report

The applicants proposed a trenching and diamond drilling project to explore for tungsten, copper, lead, and zinc.

The Field Team has recommended the application be denied.

Present workings consist of four test pits and one trench. Mineralization occurs in sparse amounts in a network of quartz veinlets along a prominent shear zone in granite or syenite. Pyrite, pyrrhotite, sphalerite, galena and scheelite are present in the quartz veinlets, but in sparse amounts. No minable concentrations were noted by the examiners.

The thinness of the veins and the paucity of scheelite, chalcopyrite, molybdenite, sphalerite and galena mineralization along the shear zone indicate that DMEA assistance is not geologically justified.

I recommend this application be denied exploration assistance.

E. L. Newcomb
E. L. Newcomb

Copy retained 40

Docket

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 22 1954

October 21, 1954

Memorandum

To: George C. Selfridge, Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region VIII

WSM

Subject: Docket No. DMEA-3429
Thwaites and Chapman, 84 State St., Boston 9, Mass.
Drew's Lake Property - (Copper-Tungsten-Lead-Zinc)
Littleton Property - (Molybdenum-Copper-Uranium-Tungsten)
Aroostook County, Maine

Transmitted herewith are the original and three copies each of the Field Team's Reports on Examination of the Drew's Lake and Littleton Properties.

H. T. Millar

H. T. Millar

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE
10-27-54
(date)

Department of the Interior
Defense Minerals Administration
RECEIVED
OCT 22 1954

Field Team Report on Examination of Property

by
H. L. Burmeister and John B. Hanley 1/

DMEA Docket No. 3429 - (Molybdenum-Copper-Uranium-Tungsten)
Thwaites and Chapman, 84 State Street, Boston 9, Mass.
Property: Littleton Property, Aroostook County, Maine

Summary

The purpose of this application is to explore for additional reserves of strategic molybdenum, copper, uranium and tungsten by trenching and diamond core drilling.

Conforming with a request by the Operating Committee for a field examination of the deposit the Field Team representatives conducted this examination on September 16, 1954.

The present workings which consist of four rock pits and one bulldozer trench were all examined. Pits, trenches, dumps, outcrops and adjacent swamp area were scanned with a Geiger counter and a scintillator with negative results. The ultra-violet light revealed no scheelite in chip samples taken from the pit walls and excavated material. No more than could be considered a trace of any strategic material was found.

Conclusions

Examination of all available workings and outcrops result in the conclusion that this property contains strategic materials in quantities too small to justify further exploration.

Recommendations

Due to the above conclusions, the Field Team recommends that this application be denied.

1/ H. L. Burmeister, Engineer, Bureau of Mines.
John B. Hanley, Geologist, Geological Survey.

~~Reviewed by~~
DMEA OPERATING COMMITTEE
10-27-54
(date)

Geology

The geology of this property is well described in the memorandum reports by Burbank and by Miller. The only new work consists of two small pits south and southeast of the northwest trenches shown on Burbank's map and a bulldozer trench along an old road to the east of the molybdenite trench in the woodlot. The new work has exposed no richer mineral content than that in the old trenches and the bulldozer trench exposed only unmineralized limestone. The southern trench exposed a band of limestone breccia at least 6 inches thick, but this breccia contained no more molybdenite, pyrite, or chalcopyrite than the massive limestone.

All trenches and pits and the granite outcrops around the swamp were scanned with a Geiger counter and a scintillator. No high readings that could be duplicated were found, and most of the measurements were within the background range, which was very erratic during the course of the examination. The walls of two of the trenches could not be checked because the openings were flooded, but the dump material from these trenches was carefully scanned with negative results.

Samples of possible tungsten-bearing material were collected and later checked with ultra-violet light. No scheelite was found.

Samples taken by W. S. Burbank showed that the overall molybdenum content of the richest trench was less than 0.5 percent, and that copper and tungsten were present only as traces. A selected sample of the richest rock in this property as reported to Burbank by Harry M. Briggs contained 1.60 percent molybdenum and 0.07 percent copper.

Ore Reserves

The low content of molybdenite, chalcopyrite, and other sulfide minerals, the absence of scheelite, and the negative results of the radio-

Time Spent on Property

Four hours were spent on the deposit in the course of the examination. The Field Team representatives were accompanied by the applicants, Mr. Thwaites and Mr. Chapman.

Name and Location of Property (Fig. 3)

The Littleton Property, also known as the Henderson Molybdenum Prospect, is located in N. Lat. 46°12½' and W. Long. 67°47½', and is reached from Houlton, Maine, by proceeding eastward on Route US 2 for a distance of approximately 1 mile to its junction with Foxcroft Road. Proceed northward on Foxcroft Road a distance of 5.4 miles to a farm road on the east. The trenches examined lie about 200 yards north of the farmhouse with a swamp-covered area extending north of the trenches.

Competency of Applicant

Mr. Thwaites has done considerable prospecting in the area but it is judged that neither he nor Mr. Chapman have had actual mining experience.

Property Rights

This property which has also been called the Henderson Molybdenum Prospect, consists of approximately 210 acres which is a portion of the farm owned by G. A. Henderson. The applicants have an option on the 210 acre area.

Description of Property

The area north of the farmhouse on which three of the pits are located consists of nearly level grassland. The three pits are embraced in a space not to exceed 150 feet in diameter. A fourth pit is located in second growth timberland, about 150 yards northeasterly of the group of three pits. The area northeast and northwest of this fourth pit consists of wooded swamp.

metric scanning of the property make any estimate of ore reserves unnecessary.

Description of Past Operations

From observations during this examination it is evident that no mining operations have been conducted on this property. Government files disclose no record of production

Availability of Manpower, Equipment and Supplies

There are no local miners. A drill and portable compressor can be rented in Houlton, Maine. Manufacturers of mining equipment have sales representatives in Portland, Maine.

Applicant's Proposal

The applicant proposed to explore this area by trenching and diamond core drilling for strategic molybdenum, copper, uranium and tungsten. The combined cost of exploring both the Littleton and Drew's Lake properties was submitted by the applicant as $41,000.00.

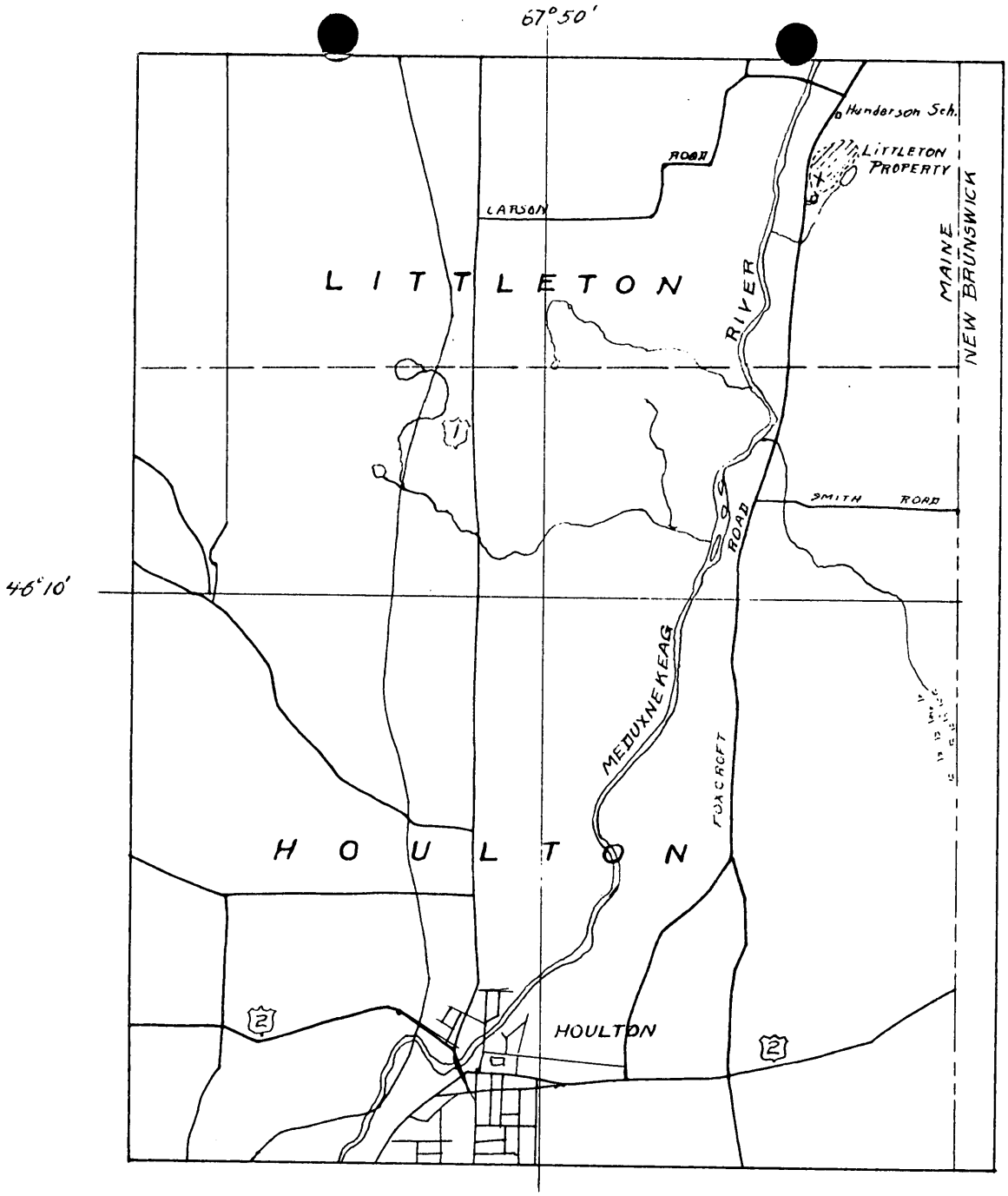
W. T. Millar

W. T. Millar, Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII

K. Lewis (for) Q.D.S.

Quentin D. Singewald, U. S. Geological
Survey Member, Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII

College Park, Md.
October 14, 1954



LITTLETON PROPERTY
AROOSTOOK COUNTY, ME.

DOCKET DMEA 3429

U.S.G.S. HOULTON QUADRANGLE
U.S.B.M. H.L.S. SEPT. 1954

0 inches 1
0 miles 1

FIG. 3

RECEIVED
OCT 22 1954

Field Team Report on Examination of Property

by
H. L. Burmeister and John B. Hanley 1/

DMEA Docket No. 3429 - (Copper-Tungsten-Lead-Zinc)
Thwaites and Chapman, 84 State Street, Boston 9, Mass.
Property: Drew's Lake Property, Aroostook County, Maine

Summary

The subject docket is an application for Government assistance in exploring for strategic copper, tungsten, lead and zinc by trenching and core drilling.

This application was referred to the DMEA Field Team for a field examination to determine the justification of the proposed exploratory work. For this purpose representatives of the Bureau-Survey Field Team examined the deposit on September 16, 1954 in company with the applicants, Mr. Harry A. Thwaites and Mr. John V. Chapman.

Exploration as outlined in the application consists of bulldozing the overburden, blasting rock trenches across the shear zone and diamond core drilling. The total cost of this program and the Littleton project was submitted as $41,000.00.

Mineralization in this area is confined to a shear zone in granite-syenite which contains a network of quartz veinlets. Three existing rock pits were examined, two of which were chip sampled, the other ~~of which~~ was filled with water and inaccessible. Material excavated from this flooded pit was examined but no ore minerals were observed. The chip samples from the first two pits were examined in ultra-violet light and afterward the pits were

1/ H. L. Burmeister, Engineer, Bureau of Mines.
John B. Hanley, Geologist, Geological Survey.

examined under the light at night. The area to the south of the pits was examined for an extension of the shear zone but no indications of continuity were found.

Conclusions

Based on the data compiled during this examination, it is concluded that there are insufficient concentrations of strategic minerals to justify further exploration.

Recommendations

On the grounds of insufficient content of strategic minerals and the unfavorable geologic conditions for the occurrence of richer concentrations, the Field Team recommends that the Government deny this application.

Time Spent on Property

The Field Team representatives spent four daylight hours and three hours after dark examining this property. They were accompanied by the applicants, Mr. Harry A. Thwaites and Mr. John V. Chapman.

Name and Location of Property (Fig. 1 and 2)

The Drew's Lake Property is located in the Town of Linneus, Aroostook County, Maine; N. Lat. 46°05'30" and W. Long. 68°00'30". It is reached by proceeding westward from Houlton, Maine, on Route US 2 approximately 5.6 miles to the intersection of New Limerick Road. Proceed south to New Limerick, then turn west and proceed for approximately 1.4 miles to Drew School; thence proceed south 0.6 mile to gravel road on right; then follow the gravel road 0.4 mile to the shore of Meduxnekeag Lake; cross the bridge over the lake outlet and follow a bulldozed trail south about 0.3 mile to the open workings. All roads except the bulldozed trail are passable throughout the year.

Competency of Applicant

Mr. Chapman indicates that he has had no mining experience. Mr. Thwaites has prospected in this area for 5 to 10 years but as far as known has no further mining experience.

Property Rights

All the property covered by this application is owned by Mr. Roy Branscombe, Oakfield, Maine, and is under option to the applicants.

Description of Property

The entire optioned property consists of 900 acres. Only the northern portion containing approximately 200 acres and lying entirely on the western slope of Drew Hill, has been represented as containing mineralization. For this reason Fig. 2 includes only the 200 acre area.

Lots "A" and "B" are ~~quite~~ heavily wooded, the overburden ranging from 1 to 8 feet deep. Access to these lots by four wheel drive vehicles may be had by turning westward from Linneus Road onto a logging road at a point 50 feet south of where Linneus Road crosses Meduxnekeag Stream.

Prospecting work on this property consists of two accessible pits and one which is flooded. To the southwest of pit No. 2 an area has been bulldozed to bedrock but shows no evidence of a shear zone or mineralization.

Geology

The country rock in the Drew's Lake property is a granite-syenite rock that intrudes the phyllite underlying Drew Hill. The contact between the granite and the phyllite is a few hundred yards to the east of the shear zone exposed in Pits No. 1 and No. 2. The contact appears to trend almost due north with small offshoots of the igneous rock cutting across the foliation of the phyllite.

The shear zone, as exposed in Pits No. 1 and No. 2, and as reported in Pit "A", is entirely in the granite-syenite. The surface expression of the zone is a bench along the west side of the hill. This bench is more or less parallel to the shore line of Meduxnekeag Lake, but approaches the lake shore to the south of the explored area. North of Pit "A" the shear zone appears to bend toward the east and to cross the contact between the granite rock and the phyllite on the Barnes property. As traced easterly the shear zone extends to the No. 1 vein on the Barnes property, where it trends almost due east.

At the time of the examination the small trench in the bedrock in Pit "A" was completely under running water and could not be seen. According to Mr. Thwaites, this trench had just uncovered the footwall of the shear zone when work had to be stopped because of the torrential rains of the September 11 hurricane. The material excavated from this trench was highly fractured granitic rock thus confirming Mr. Thwaites' observations.

A trench 6 feet deep in the bedrock in Pit No. 1 on the west side of the logging road exposes an intricate network of quartz veins adjacent to the hanging wall of the shear zone. Although the shear zone appears to be 15 to 18 feet wide in this pit, the maximum width of the network of quartz veins is 10 feet at the surface of the bedrock and decreases to about 4 feet at the bottom of the trench. The hanging wall of the network of quartz veins dips 55 to 60° SE., and the probable footwall dips 35° SE. near the the top of the trench and increases in steepness toward the bottom of the trench where it is practically parallel to the attitude of the hanging wall. The quartz veins in the network range from 2 to 12 inches in thickness, and surround blocks of fractured country rock. Both the vein quartz and the

country rock are highly fractured, and the surfaces of most all fractures are coated with limonite stains.

The quartz veins in this trench contain visible sulfide minerals. Pyrite, pyrrhotite, sphalerite, and galena are most abundant near the margins of the quartz; less abundant or absent in the central parts of the veins. The average grade of these sulfides is too low to be ore, and no minable concentration of any sulfide minerals was seen. Examination of a chip sample collected horizontally across the network of quartz veins about one foot below the rim of the north wall of the trench by Mr. Burmeister revealed no significant content of sulfide minerals and, under ultra-violet light, considerably less than 0.5 percent scheelite, most of which was a film coating the fracture planes in the quartz. When the trench was examined under ultra-violet light the scheelite was seen to be most abundant near the hanging wall of the shear zone, and to decrease rapidly in abundance away from the hanging wall through a 6-foot width, moreover it occurs chiefly as a film on the fracture planes in quartz and only rarely as solid masses in the quartz. The scheelite content in the network was visually estimated to be less than 0.1 percent.

Neither the shear zone or the quartz veins are exposed between Pit "A" and Pit No. 1, (see Fig. 2), a distance of about 175 feet. In addition, neither was seen at any place in the 300-foot distance between Pit No. 1 and Pit No. 2.

A small trench just south of Pit No. 2 exposes several feet of the shear zone on the west side of a slightly fractured quartz vein. The lower, western part of the pit in the sheared granitic rock was filled with water and could not be closely examined. The upper, eastern part that exposed the

quartz vein was accessible, but showed that the quartz vein contained the bulk of the sulfide minerals. In this trench the quartz vein splits into two branches, the western one of which is about 14 inches thick; the eastern about 6 inches thick. These veins are separated by altered and sheared country rock approximately 18 inches thick. At the deepest place in the western part of this trench the quartz vein dips steeply to the southeast. Where the eastern part of the trench begins, however, the dip is reversed and is gentle to the northwest. The quartz vein branches where the reversal in dip was observed. A few feet to the east both quartz veins are flat-lying, and beyond this at the eastern end of the trench, a horizontal distance of about 3 feet, the dip of both quartz veins is gentle to the southeast. The western quartz vein contains more visible sulfide minerals than the eastern vein, and the sulfide minerals are concentrated in the quartz adjacent to the contact between the country rock and the vein, although a minor concentration occurs at spots in the medial part of the vein. A chip sample of this vein collected by Mr. Burmeister showed a distinctly lower content of scheelite than the sample from Pit No. 1. This agreed with Mr. Thwaites' impression that Pit No. 2 was not as rich as Pit No. 1. When this trench was examined by ultra-violet light much the same relationships were found as in Pit No. 1 except that the scheelite content was markedly less than in Pit No. 1.

These facts were checked in Pit No. 2 where a quartz vein about 12 inches thick and two thin veins were exposed. A small area about 1,200 feet southwest of Pit No. 1 along the shear zone, as traced on the basis of quartz float by Mr. Thwaites, has been bulldozed. No shear zone or quartz vein was uncovered by this work, although the granitic rock was well exposed.

According to Mr. Thwaites the shear zone can be traced for about half a mile in total length by quartz float. A quick traverse southwest of Pit No. 2 to the logging road showed the quartz float to be scarse and widely scattered along the probable trend of the shear zone. The return traverse along the logging road, which offered excellent exposures of the bedrock as the result of the recent rains, disclosed no quartz veins or any sheared rock, particularly upslope above the last pieces of quartz float. Consequently, any extension of the shear zone southwest of Pit No. 2 is not warranted by the present knowledge of the geology.

Ore Reserves

The low content of scheelite, estimated to be less than 0.1 of 1 percent in the richest exposure, and of the sulfide minerals, and the thinness of the mineral-bearing rock make any estimate of ore reserves unnecessary. Insufficient prospecting has been done on the property to provide a reasonable basis for estimating ore resources, even if the scheelite and other sulfide minerals had occurred in minable concentrations, as they do not.

Description of Past Operations

The applicant did not claim any past production and the Government files disclose no record of production. The several prospect pits examined are the only workings on the property and could not have produced any appreciable tonnage of ore.

Availability of Manpower, Equipment, Supplies

As mining is not active in this area, miners would have to be imported or local men trained. A jackhammer and portable air compressor can be rented in Houlton. Representatives of mining equipment manufacturing firms are located in Portland, Maine and Boston, Massachusetts.

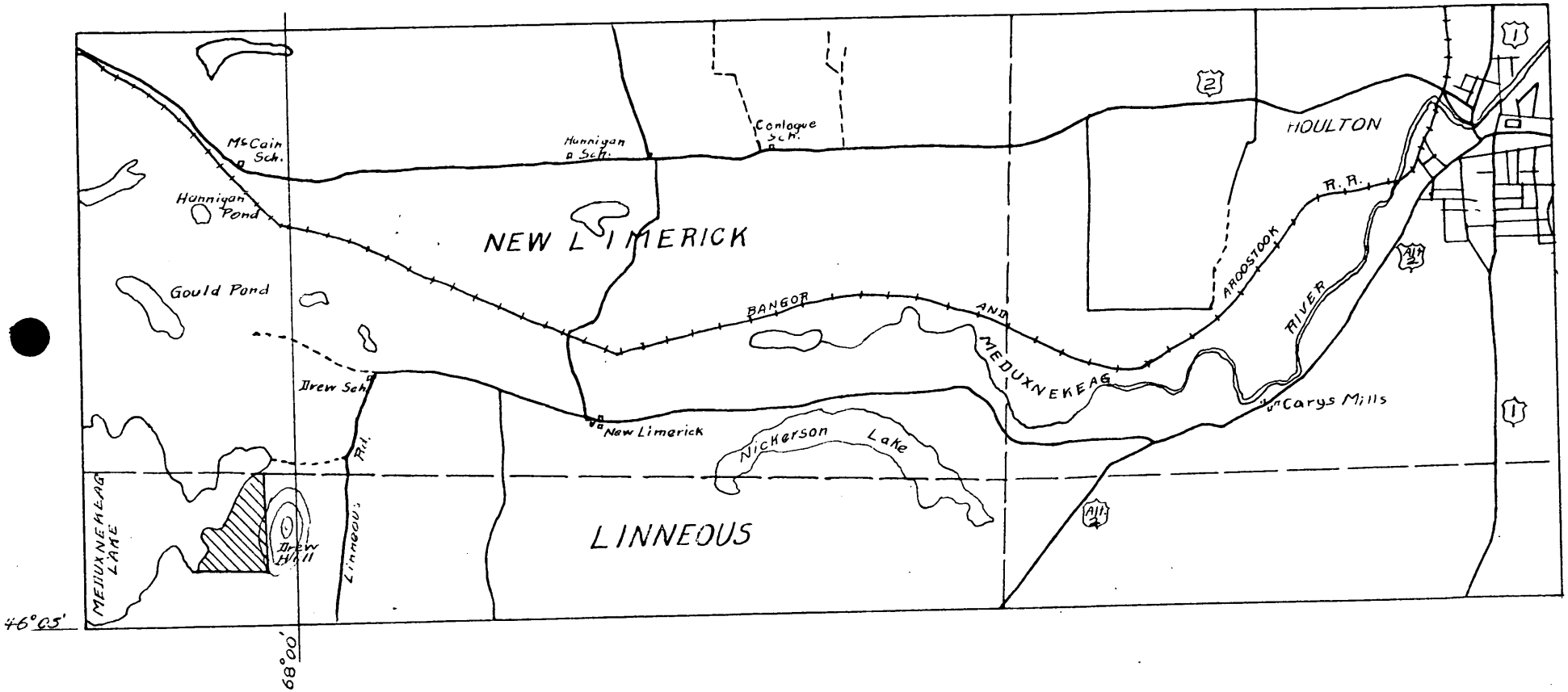
Applicant's Proposal

The applicant proposed to trench and diamond core drill the area to explore for strategic copper, tungsten, lead and zinc. The combined cost of the Drew's Lake and Littleton property explorations was submitted in the application as $41,000.00.

W. T. Millar, Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII

(for) Quentin D. Singewald, U. S. Geological
Survey Member, Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII

College Park, Md.
October 14, 1954



DREWS LAKE PROPERTY
AROOSTOOK COUNTY, ME.

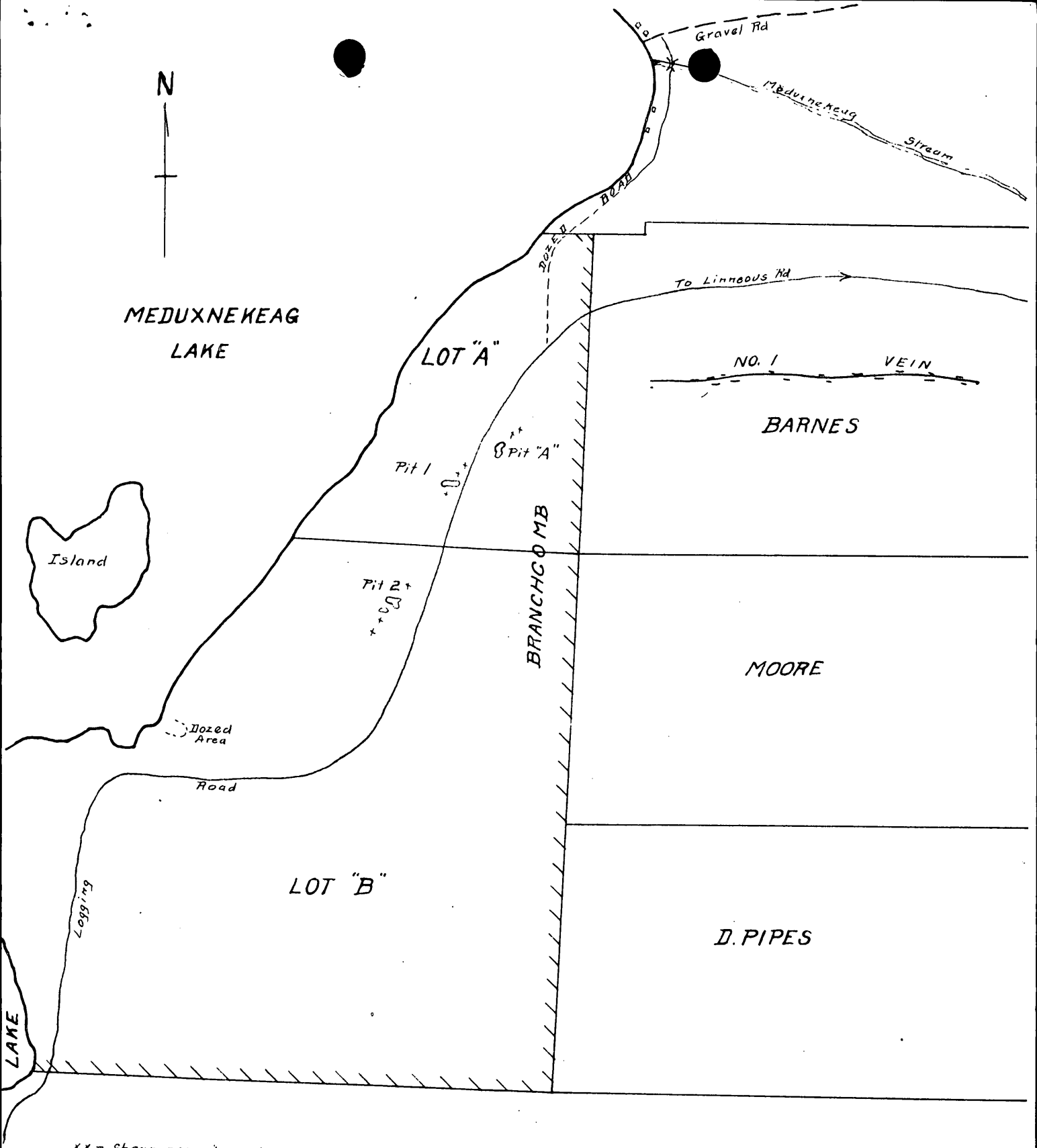
DOCKET DMEA 3429

U.S.G.S. HOULTON QUADRANGLE

U.S.B.M. R.F.C. SEPT. 1954

0 inches 1
miles

FIG. 1



DREWS LAKE PROPERTY
AROOSTOOK COUNTY, ME.
DOCKET DMEA 3429
U.S.B.M. 7423. SEPT. 1954

0 inches 1
0 feet 350

FIG. 2

400
DOCKET
SURNAME
Rutledge
Martin
Hedges
Fardalor
H. Johnson

Mr. John V. Chapman
Thwaites and Chapman
84 State Street, Room 532
Boston 9, Massachusetts

Re: Docket No. DMEA 3429 - Tungsten, Copper, Lead, Zinc, and Uranium
Drew's Lake & Littleton Properties
Aroostook County, Maine

Dear Mr. Chapman:

Reference is made to your application for exploration assistance.

Before consideration can be given an application, it is necessary for the applicant to submit a program outlining the work desired. This need not be elaborate and detailed; pencil sketches are acceptable. Such programs can be modified at any time prior to an actual contract and contracts have provision for modification after a project is started. The engineers and geologists of the DMEA field team examining a mineral deposit often make suggestions regarding modifications.

Results of drilling and other exploration should be submitted for our consideration at this time. If you do not have reports but know where they can be obtained or inspected, this information will be appreciated.

We realize that time is of the essence if any exploration is to be accomplished this summer. Therefore, it is suggested that you prepare and submit a supplement to your application listing the work proposed, the approximate cost, the location of proposed work, and providing any technical information possible.

The field team will be informed that an application is expected so that an early examination can be scheduled. If an engineer or geologist will be in the immediate area prior to the arrival of your supplemental application, authorization will be given to inspect the deposits. In such case, you may hear from W. T. Miller, Executive Officer, DMEA Field Team, Region VIII, U. S. Bureau of Mines, College Park, Maryland.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

GEEHAN/MARTIN/foc
8-19-54
cc to: Docket
Code 400
Adm. Reading File
Operating Comm.
FT. Reg. 8
R. W. Geehan, USBM
E. L. Newcomb, USGS

400

Docket
Surname
Rutledge
Martin
Fitzsimmons

AUG 20 1954

Mr. W. T. Millar, Executive Officer
DMEA Field Team, Region VIII
Bureau of Mines
Eastern Experiment Station
College Park, Maryland

Re: Docket No. DMEA 3429 - Tungsten,
Copper, Lead, Zinc, & Uranium
Thwaites and Chapman
Drew's Lake & Littleton Properties
Aroostook County, Maine

Dear Mr. Millar:

Enclosed are two copies of a letter to Mr. John V. Chapman in regard to the above-docketed application for exploration assistance.

It will be appreciated if you will give Mr. Chapman assistance in preparing the required supplemental application. However to expedite processing the application, a field examination of the property may be made prior to the receipt of the requested data if you have an engineer or geologist in the immediate area.

Two copies of a relevant memorandum dated August 12, 1954, by R. D. Trace, Geological Survey, and two copies each of memoranda dated August 16 and August 17, by Robert W. Geehan, Bureau of Mines, are enclosed for your information.

Sincerely yours,

W. S. Martin
ACTING Chairman, Operating Committee (GHB)

Enclosure

APPROVED:

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

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

FARutledge:foc
8-19-54
cc to: Docket
Code 400
Adm. Reading File
Operating Comm.
FT. Reg. 8
R. W. Geehan, USBM
E. L. Newcomb, USGS

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON 25, D. C.

August 17, 1954

WSM

Memorandum

To: W. S. Martin, DMEA, Room 3538

From: Robert W. Geehan

Subject: DMEA 3429 - Tungsten, et al
Thwaites and Chapman

Attached is a rough draft of a letter to Mr. Chapman regarding his proposal, for consideration in place of the present letter.

Mr. Chapman will obviously need to employ an engineer to supervise any work; it would seem that he might well do so at this time.

At the very least, he should provide some idea as to what, where, and how much work he proposes. As it now stands the field team would be required to pass on an unknown proposal or to draft a proposal and then pass judgment on it.

Robert W. Geehan

Robert W. Geehan

Attachment

Note.

Hook had another phone call from Olfman, Monday, Aug. 16. At that time Olfman was told to submit definite program with costs and also to discuss program with Bureau of Mines in Boston.

J.A.R.

DOCKET
Surname:

400

Rutledge
Martin
Geehan

Noted - not approved

Mr. W. T. Millar, Executive Officer
DMEA Field Team, Region VIII
Bureau of Mines
Eastern Experiment Station
College Park, Maryland

Re: Docket No. DMEA 3429 - Tungsten,
Copper, Lead, Zinc, & Uranium
Thwaites and Chapman
Drew's Lake & Littleton Properties
Aroostook County, Maine

Dear Mr. Millar:

The above-docketed application for exploration assistance is being referred to your office for a field examination of the property.

Normally in the case of such an incomplete application, we would have requested the applicant to furnish more information before referring the docket to the Field Team for an examination of the property. In the present case, however, as it was felt such a request would engender little additional data and a field examination should be expedited if exploration is warranted and is to be accomplished this summer, we have not asked the applicant for additional data.

Two copies of a relevant memorandum dated August 12, 1954, by R. D. Trace, Geological Survey, are enclosed for your information.

Sincerely yours,

Chairman, Operating Committee

Enclosures

cc: DOCKET
FIELD TEAM, REG. 8
CODE 400
ADM. READING FILE
OPERATING COMMITTEE
R. W. GEEHAN, USBM
E. L. NEWCOMB, USGS

APPROVED:

Member, Bureau of Mines

Member, Geological Survey

FARutledge/ls
8-16-54

DOCKET
Surname:
Rutledge
Martin
Geehan

400

Noted - not approved

Mr. John V. Chapman
Thwaites and Chapman
84 State Street, Room 532
Boston 9, Massachusetts

Re: Docket No. DMEA 3429 - Tungsten, Copper, Lead, Zinc, & Uranium
Drew's Lake & Littleton Properties
Aroostook County, Maine

Dear Mr. Chapman:

Reference is made to your phone call of August 11, 1954, to Mr. Lawrence G. Houk, and to your application for exploration assistance in exploring for tungsten, copper, lead, zinc, and uranium, on the above-named properties.

The above-docketed application for exploration assistance has been reviewed by the Iron and Ferro-Alloys Division of the Defense Minerals Exploration Administration and referred to Mr. W. T. Millar, Executive Officer, DMEA Field Team, Region VIII, Bureau of Mines, Eastern Experiment Station, College Park, Maryland, for a field examination of the property. Any assistance that you can render the members of the Field Team will be appreciated.

Your application for exploration assistance was incomplete in many respects. Normally we would have requested that additional data be furnished to this Administration before scheduling a field examination. However, it was determined in the present case that a field examination should be expedited if exploration is to be considered for this season.

We understand that the Drew's Lake property has previously been explored by two diamond drill programs. The results of these, and any other past exploration projects of which you have knowledge, should be submitted for our consideration. Include any geologic or engineering reports, assay maps, or other technologic information you may have, indicating on each whether you require its return.

Sincerely yours,

Administrator

cc: DOCKET
FIELD TEAM, REG. 8
CODE 400
ADM. READ. FILE
R. W. GEEHAN, USBM
E. L. NEWCOMB, USGS

FARutledge/ls
8-16-54

Docket

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON 25, D. C.

August 16, 1954

WSM

Memorandum

To: W. S. Martin, DMEA, Room 3538

From: Robert W. Geehan

Subject: DMEA 3429 - Tungsten, lead-zinc, et al.
Thwaites and Chapman

No information is available with regard to previous examinations.

It is suggested that the applicant be requested to furnish maps, assays, and a program.

Robert W. Geehan

Robert W. Geehan

MI—90

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

REFERENCE SLIP

DATE 8/13/54

REFERRED TO:
1. Mr. Mittendorf-4624
2.
3. Mail Room -4539
4.

FOR:

..... Action	..... Recommendation
..... Approval	..... Record of .....
..... Comment	..... Referring to .....
..... Conference	..... Reply for signature of .....
..... Consideration	..... Rewriting
..... Filing	..... Signature
..... Instructions	..... Suggestions
..... Investigation	..... Your information
..... Initials	
..... Mailing	
..... Previous correspondence	

Op Comm. says:— Refer to Field

REMARKS: There's a policy question here. How much can we ask a Field Team to help an applicant with his application. If we demand too much of applicants who have no technical background, we may discourage every one except the established mining co's.

Check (X) before the items needing attention.

WSM
Initials of sender.

GPO 16—63815-1

400

DOCKET
Surname:
Rutledge
Martin

cc: Docket
Code 400
Adm. Read. File
FT, Reg. 8
R. W. Geehan, USBM
E. L. Newcomb, USGS

Mr. John V. Chapman
Thwaites and Chapman
84 State Street
Boston, Massachusetts

Re: Docket No. DMEA 3429 - Tungsten, Copper, Lead, Zinc, & Uranium
Drew's Lake & Littleton Properties
Aroostook County, Maine

Dear Mr. Chapman:

Reference is made to your phone call of August 11, 1954, to Mr. Lawrence G. Houk, and to your application for exploration assistance in exploring for tungsten, copper, lead, zinc, and uranium on the above-named properties.

After review by all relevant commodity divisions, we find that the information submitted with your application is insufficient to justify a field examination by the Government. To help us give your application proper consideration, it will be necessary for you to supplement that application by outlining your two proposed exploration programs. Each proposal should be clarified by a map indicating the target of the exploration and showing the location of all existing workings and the samples for which analyses were submitted with your application. Detailed cost estimates for the proposed work should also be submitted.

We understand that the Drew's Lake property has previously been explored by two diamond drill programs. The results of these, and any other past exploration projects of which you have knowledge, should be submitted for our consideration. Include any geologic or engineering reports, assay maps, or other technologic information you may have, indicating on each whether you require its return.

We realize that time is of the essence if any exploration is to be accomplished this summer. Therefore, we believe that Mr. Houk's suggestion of consulting an engineer for assistance in preparing a supplement to your application is excellent. An experienced mining engineer or geologist will understand that what we are asking for is the specific information usually required as a preliminary to a field examination for an exploration project.

Your application will, accordingly, be held in abeyance until the necessary data have been received.

Sincerely yours,

FARutledge/WSMartin/ls
8-13-54

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

Doubt whether we'll get any more information of the kind we need by asking the applicant. Please ask Geehan how he feels about our asking the applicant to have the PT help him make out his application. Also clear with Millar if Geehan will go along with that idea

WSM
8/12/54

Geehan says No! Go to applicant for data FAR.

Dorkey

IN REPLY REFER TO:

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

August 12, 1954

WSM

Memorandum

REVIEW OF APPLICATION DMEA-3429 (copper, et al.)

To: W. R. Griswold, Defense Minerals Exploration Administration
From: R. D. Trace, U. S. Geological Survey
Applicant's name and address: Thwaites and Chapman, 84 State Street, Boston 9, Massachusetts
Name of property: Drew's Lake and Littleton Properties
Location of property: Aroostook County, Maine
Summary of applicant's proposal: None given.
Comments: A) General: 1) The application does not include a program of exploration. 2) Previously known base metal prospects in these areas have not proved economic.

B) The Drew's Lake property: The information given about this property is incomplete and vague. The property has been examined by the Bureau of Mines and by Hanley and Pavlides of the Survey but since then, we understand that the area was explored by 2 different drilling programs. We suggest that the operator be requested to furnish this data before any further consideration be given.

C) Littleton property: We think that this probably is a new discovery and has not been examined by the Survey. The data given in the application is of no help in evaluating the property.

RECOMMENDATION: Request applicant to furnish additional data.

Bob Trace

R. D. Trace

Docket 3429

August 11, 1954

Mr. John Chapman telephoning longdistance to Mr. Houk.

Mr. Chapman: I see I have a docket number. Have you any idea how long it will be before they send a crew up here?

Mr. Houk: That is out of my shop.

Mr. Chapman: I am considering a trip and would like to make plans on how long I can be away as I want to be here for the examination.

Mr. Houk: They generally take two weeks to a month.

Mr. Chapman: You know the conditions up there -- the snow flies.

Mr. Houk: Routine in Washington takes a while.

Mr. Chapman: Anyway you can hurry it up?

Mr. Houk: No. It is outside of my shop and I hesitate to interfere. Where is the tungsten located?

Mr. Chapman: On the trail that goes along the lake. About 15 feet off.

Mr. Houk: Those assays for tungsten were they picked specimens or good samples from the dump?

Mr. Chapman: We were not looking for tungsten and Harry picked up a piece and sent it in and that is what we got back.

Mr. Houk: Have you lamped the area?

Mr. Chapman: Yes. On the refuse heap it was fine then I put a lamp on it and took it to Needleman. He has the samples and they look good to me.

Mr. Houk: Do you have any kind of sample of the entire dump?

Mr. Chapman: This was picked up over the entire dump. I was looking for a good sample of lead-zinc and silver. Then I bought a field lamp - it was too cumbersome. I put the lamp on and found pieces that had plenty in them and some with just spots.

Mr. Houk: How large a sample did you have assayed?

Mr. Chapman: Five pounds. My trouble is that I need a good engineer.

Mr. Houk: You don't waste money by hiring a good consultant.

Mr. Chapman: Yes, I know that. Wish you were up here. Harry says we really have hold of something.
I am putting money into this and I don't want to go away for a vacation if possible to be here for the crew.

Mr. Houk: They will notify you plenty of time in advance. It will probably take two weeks from the time you made your application.

Mr. Chapman: Needleman is very helpful and another man is there too.

Mr. Houk: Holt?

Mr. Chapman: Yes I believe that is his name. They looked at the samples and Holt said if it was up to him he would authorize a field examination. He seems to be a pretty shrewd old fellow. He thought the tungsten was pretty good.

Mr. Houk: I think the application will be handled as a tungsten application rather than lead-zinc.

Mr. Chapman: Yes. I thought so too.

Mr. Houk: You put down copper, lead-zinc, tungsten, and if they handle it, it will probably be for tungsten.

Mr. Chapman: I feel this is a good proposition. I made up my mind that I will spend $10,000 on it. Cyprus asked me to cross trench and put a pit down. Then I was talking with Needleman and he suggested that I go to the Government. I think we have a good chance there and if it can be expedited, I would appreciate it.

Mr. Houk: Ok. I will see if we can't hurry it along.

August 4, 1954

Thaites & Chapman
84 State Street
Boston 9, Mass.

Subject: DMEA-3429
Re: Exploration Assistance

Gentlemen:

The receipt of your application dated August 2, 1954 for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA-3429 and referred to the Base Metals Division.

Kindly refer to in any future correspondence relating to your application.

Sincerely yours,

CHAPMAN & CO., INC.

Wholesale Distributors

HUDSON FUND, Inc.—TELEVISION—ELECTRONICS FUND, Inc.

MEMO

from JOHN V. CHAPMAN

Aug. 2, 1954

Dear Larry. (Hank)

Enclosed are the papers and material I have on the properties at Houlton, also photostats of the options.

I have your report on the old property and if you want it let me know and I will send it to you.

As you are very familiar with the property, I hope you will be able to cut some of the red tape and possibly hurry things up a little in Washington.

Best regards from Edith + Myself

Sincerely

John

84 STATE STREET, BOSTON, MASS. CAPITOL 7-1970

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Form Approved.
Budget Bureau No. 42-R1035.2.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 3 - 1954

APPLICATION FOR AID IN AN EXPLORATION PROJECT, PURSUANT TO DMEA ORDER 1, UNDER THE DEFENSE PRODUCTION ACT OF 1950, AS AMENDED

Not to be filled in by applicant

Docket No. 3429
Metal or Mineral Copper, et al.
Date Received
Estimated Cost
Participation (Government %)

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address: Thwaites and Chapman
84 State Street
Boston 9, Mass.
Room 532

John V. Chapman
84 State St. Boston 9, Mass.
Harry A. Thwaites
Houlton, Maine

(*b*) If other than an individual, add to your name above whether a corporation, partnership, etc., and the name of the State in which incorporated or otherwise organized.

(*c*) If a corporation, add to above statement, titles, names and addresses of officers.

(*d*) If a partnership, add to the above statement the names and addresses of all partners.

2. *General.*—Read DMEA Order 1, "Government Aid in Defense Exploration Projects," before completing this application. Submit this application and all accompanying papers in quadruplicate (four copies), with your name and address on each sheet of the application and on all accompanying papers. Where sufficient space is not provided on the form for all required information, state it on an accompanying paper, with a reference in each case to the instruction to which it refers by number. Comply with all applicable instructions; or, if not applicable, so state. File the application with Defense Minerals Exploration Administration, Department of the Interior, Washington 25, D. C., or with the nearest field executive officer thereof.

3. *Applicant's property rights.*—(*a*) State the legal description of the land upon which you wish to explore, including all land which you possess or control that may be benefited by the exploration, and excluding any land or interest in land which is not to be included in the exploration project contract Town lot #11 R.D. in the townof New Limerick, Aroostook County, Maine - Lots A, B, 1,2,3, in the 10th, range of Lots - Lots 1,2,& 3 in the 11th range lots # 4 range 10 lots # 4& 5 Rnage 11 in the Town of Linneus, Aroostook County, Maine. Lot # 7 Range 2 Littleton, Aroostook Co, Maine.

(*b*) State any mine name by which the property is known.

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise Options

(*d*) If you are not the owner, submit with this application a copy of the lease, contract, or other document under which you control the property.

(*e*) If you own the land, describe any liens or encumbrances on it

(*f*) If the land consists of unpatented claims, add to the description above, the book and page numbers for each recorded location notice.

See note attached

4. *Physical description.*—(*a*) Describe in detail any mining or exploration operations which have been or now are being conducted upon the land, including existing mine workings and production facilities. State your interest, if any, in such operations. Also describe accessibility of mine workings for examination purposes.

(*b*) State past and current production, and ore reserves, if any, giving quantities and grades.

(*c*) Describe the geologic features of the property, including mineralization, type of deposit (vein, bedded, etc.), and your reasons for wishing to explore. Illustrate with maps or sketches. Send with your application (but not necessarily as a part of it) any geologic or engineering report, assay maps, or other technologic information you may have, indicating on each whether you require its return to you.

(*d*) State the facts with respect to the accessibility of the project: Access roads, distances to shipping, supply and residence points. 6 miles out of Houlton, Me. Hard surface road, 2½ miles from R. R.

(*e*) State the availability of manpower, materials, supplies, equipment, water, and power.

Water 200 ft. from property to Lake.
Electric Power within 1000 ft.

16—66551-1

5. *The exploration project.*—(*a*) State the mineral or minerals for which you wish to explore Copper - Silver Lead, Zinc, Tungstun and Uranium

(*b*) Describe fully the proposed work, including a map or sketch of the property showing a plan (and cross sections if needed) of any present mine workings, and the location of the proposed exploration work as related to such features as contacts, veins, ore-bearing beds, etc.

(*c*) The work will start within ..... days and be completed within ..... months from the date of an exploration project contract.

(*d*) State the operating experience and background of the applicant with relation to the ability to carry out such exploration project, and also that of the person or persons who will supervise the operations.

6. *Estimate of costs.*—Furnish a detailed estimate of the costs of the proposed work (you will have to use a separate sheet), under the following headings. Add the totals under all headings to give the estimated total cost of the project:

(*a*) *Independent contracts.*—(Note.—If the applicant does not intend to let any of the work to contractors, write "none" after this item. To the extent that the work is to be contracted, do not repeat the cost of the contract-work in subsequent items.) State the cost of any proposed independent contracts for the performance of all or any part of the work, expressed in terms of units of work (such as per foot of drilling, per foot of drifting, per hour of bulldozer operations, per cubic yard of material moved, etc.).

(*b*) *Labor, supervision, consultants.*—Include an itemized schedule of numbers, classes and rates of wages, salaries or fees for necessary labor, supervision and engineering and geological consultants.

(*c*) *Operating materials and supplies.*—Furnish an itemized list, including items of equipment costing less than $50 each, and power, water and fuel.

(*d*) *Operating equipment.*—Furnish an itemized list of any operating equipment to be rented, purchased, or which is owned and will be furnished by the Operator, with the estimated rental, purchase price, or suggested use-allowance based on present value, as the case may be.

(*e*) *Rehabilitation and repairs.*—Furnish a detailed list showing the cost of any necessary initial rehabilitation or repairs of existing buildings, installations, fixtures, and movable operating equipment, now owned by the Operator and which will be devoted to the exploration project.

(*f*) *New buildings, improvements, installations.*—Furnish a detailed list showing the cost of any necessary buildings, fixed improvements, or installations to be purchased, installed or constructed for the benefit of the exploration project.

(*g*) *Miscellaneous.*—Furnish a detailed list showing the cost of repairs to and maintenance of operating equipment (not including initial rehabilitation or repairs of the Operator's equipment), analytical work, accounting, workmen's compensation and employers' liability insurance, and payroll taxes.

(*h*) *Contingencies.*—Give an estimate of any necessary allowances for contingencies not included in the costs stated above.

NOTE.—No items of general overhead, corporate management, interest, taxes (other than payroll and sales taxes), or any other indirect costs, or work performed or costs incurred before the date of the contract, should be included in the estimate of costs.

7. (*a*) Are you prepared to furnish your share of the cost of the proposed project in accordance with the regulations on Government participation (Sec. 7, DMEA No. 1)?

(*b*) How do you propose to furnish your share of the costs?

[X] Money [ ] Use of equipment owned by you [ ] Other

Explain in detail on acompanying paper.

CERTIFICATION

The undersigned, whether as an individual, corporate officer, partner, or otherwise, both in his own behalf and acting for the applicant, certifies that the information set forth in this form and accompanying papers is correct and complete, to the best of his knowledge and belief.

Dated 8/2/54, 195...

Thwaites and Chapman
(Applicant)

By John V. Chapman

84 State Street,

Boston 9, Mass.

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

U. S. GOVERNMENT PRINTING OFFICE 16—66551-1

DREW'S LAKE PROPERTY.

(4)PHYSICAL DESCRIPTION. (a)

Property has been prospected by Thwaites during the last year, and orebody has been cross-trenched by means of Bulldozer and blasting over a length of approximately 500 feet.Overburden is deep, in some places eight to ten feet deep.Four trenches have been put across the orebody in the above length of 500 feet, and width of orezone is from 14 to 18 feet (true width). All trenches are open and can be seen anytime.

(c) Orebody is a strong shear in Granite, shot through with quartz veins and veinlets, and was located by means of quartz float, which marks the approximate strike of the shear across the property in a northeast-southwesterly direction for an approximate distance of 3000 feet. The granite continues to the southwest three to four miles further according to the Maine geological map. At the contact on the northeast end of the shear there is considerable Pegmatite showing. The shear is carrying in the quartz the following minerals:- Iron Pyrites, Arsenopyrite, Galena, Zinc Blende,Scheelite, and a few showings of Chalcopyrite. The Zinc Blende with some Scheelite also occurs in the Schist for the full width of the zone. Surface of the zone is very much oxidized to a depth of several feet.

LITTLETON PROPERTY.

(c) Granite-Limestone contact,carrying low Silver, Copper and Molybdenite values over a width of 120 feet and length of 350 feet. Also some good showings of Galena and Zinc Blende. Zone has been opened by Bulldozer abd blasting. Many quarts veinlets cut the limestone some carrying good showings of Chalcopyrite, although most are leached out. Some good showings of Flourite, and some heavy showings of Molybdenite (see assay) some small basic dykes carrying Hornblende also cutting the limestone. Mr. Jack Rabbit of the Bureau of Mines got quite a lot of action on his Geiger Counter in crossing a swamp on this contact about two years ago. Zone is very much oxidized at the surface for the full width and limestone has been crystalized. there is considerable yellow floresence under the lamp on this property, but no assaying has been done as yet for Tungsten.

J. W. N. BELL, B.Sc.
J. H. WHITE, B.Sc.

J. W. N. BELL LABORATORIES

HAILEYBURY, ONT.

CHAPMAN & CO., INC.
84 State Street
Boston, Massachusetts

No. 3077

HAILEYBURY, ONT., June 10th, 1953.

Certificate of Analysis

We have assayed 1 *sample of rock brought in by* H.A. Thwaites - Box 82 Houlton, U.S.A. *and found the following:*

	Sample No.	Oz. Gold ton	Oz. Silver ton	%Pb	%Zn
Rock	Notag	Nil	9.88	1.22	1.14

(Surface sample)

Gold reported at $..... per oz.

J. H. White
Assayer

Please Return to

Thwaites & Chapman
c/o Chapman & Co, Inc.
84 State ST.

J. W. N. BELL, B.Sc.
J. H. WHITE, B.Sc.

TELEPHONE 107 A
P. O. BOX 183

HAILEYBURY, ONT., Sept. 16th 1953.

J. W. N. BELL LABORATORIES

(HAILEYBURY ASSAY OFFICES)
ASSAYERS AND ANALYTICAL CHEMISTS

CHAPMAN & CO., INC.
84 State Street
Boston, Massachusetts

Certificate of Analysis

No. 6527

We have assayed 1 samples of Rock

Received September 11th and submitted by H.A. Thwaites
Box 82 - Houlton, Me. with the following results:

Sample No.	oz. gold ton	oz. silver ton	%Pb	%Zn
2-A	Trace	12.76	2.19	.65

Gold reported at $ ..... per oz.

..... Assayer

Please Return To

Thwaites + Chapman
c/o Chapman + Co, Inc.
84 State St.
Boston 9
Mass

J. W. N. BELL, B.Sc.
J. H. WHITE, B.Sc.

TELEPHONE 107 A
P. O. BOX 183

HAILEYBURY, ONT., August 8th 1953.

J. W. N. BELL LABORATORIES

(HAILEYBURY ASSAY OFFICES)

ASSAYERS AND ANALYTICAL CHEMISTS

Certificate of Analysis

No. 5253

CHAPMAN & CO., INC.
84 State Street
Boston, Massachusetts

We have assayed 2 samples of Rock

Received August 7th and submitted by Mr. H. Thwaites

Box 82 - Houlton, Maine. with the following results:

Sample No.	oz. Silver ton	%Pb	%Zn	
Small Sample	Trace	-	Nil	(Weathered - Schist)
Large Quartz	3.50	.74	Nil	- 12 lb. sample

Surface samples.
Schist weathered out.

Gold reported at $ ..... per oz.

J. H. White Assayer

Please Return To

Thwaites + Chapman
c/o Chapman + Co Inc.
84 State St.,
Boston 9
Mass

J. W. N. BELL, B.Sc.
J. H. WHITE, B.Sc.

TELEPHONE 107 A
P. O. BOX 183

HAILEYBURY, ONT., August 24th 1953.

J. W. N. BELL LABORATORIES

(HAILEYBURY ASSAY OFFICES)

ASSAYERS AND ANALYTICAL CHEMISTS

Certificate of Analysis

No. 5946

CHAPMAN & CO., INC.
84 State Street
Boston, Massachusetts

We have assayed 3 samples of ROCK

Received August 24th and submitted by H.A. Thwaites - Box 82
Houlton, Maine. with the following results:

Sample No.	oz. gold ton	oz. silver ton	%Pb	%Zn	
A-1	Trace	6.90	.98	1.14	Wt. 11.00 Tons
A-2	Trace	.16	Trace	Nil	Wt. [illegible]
Notag	-	.64	-	Nil	Wt. [illegible]

Gold reported at $.....per oz.

J. W. N. Bell
Assayer

Please Return To

Thwaites + Chapman
c/o Chapman + Co. Inc.
84 State ST
Boston 9, Mass

J. W. N. BELL, B.Sc.
J. H. WHITE, B.Sc.

TELEPHONE 107
P.O. Box 183

HAILEYBURY, ONT., December 1st 1953.

BELL-WHITE LABORATORIES

ASSAYERS AND ANALYTICAL CHEMISTS

Certificate of Analysis

No. 9174

CHAPMAN & CO., INC.
84 State Street
Boston, Massachusetts

We have assayed 1 samples of Rock

Received November 28th and submitted by H.A. Thwaites

Box 82 - Houlton, Maine. with the following results:

Sample No.	Tungsten (%W)
Notag	10.54

Gold reported at $.....per oz.

Assayer

Please Return To

Thwaites + Chapman
c/o Chapman + Co Inc.
84 State St.
Boston 9 - Mass

FORM 5-5-43-50M-F. & K. INC.

LEDOUX & COMPANY.
(Inc.)

ENGINEERS, CHEMISTS AND ASSAYERS

155 SIXTH AVENUE, NEW YORK

[CHAPMAN & CO., INC.]
84 State Street
Boston, Massachusetts

P

REPORT OF ASSAY

No. 568672 New York 13, N.Y. Dec. 15, 1944

Littleton property

Our assay of the sample of ORE

From Mr. Harry M. Briggs

Marked:

and submitted to us, shows:

After drying:

Molybdenum - - - - - - 2.60%

equivalent to

Molybdenum Sulphide- - 4.34%
(MoS_2)

* * * * *

To Mr. Harry M. Briggs

LEDOUX & COMPANY, Inc.

Thwaites & Chapman
84 State St.
Boston 9 Mass

SILVER, LEAD, ZINC PROSPECTS

LOCATION & AREA

Property is comprised of approximately 600 acres, situated in the Town of Linneus, State of Maine, close to good highway, 2 1/2 miles from the Bangor & Aroostook Railroad, northern boundary of property on lake shore.

GEOLOGY & ORE

Granite, Orebody consists of strong shearzone in the Granite, from twelve to twenty feet wide, shot through with quartz veinlets and veins from a fraction of an inch to three feet wide. The full width of the zone is well mineralized with Iron Pyrites, Arsenopyrite, Galena ~~and~~ Zinc Blende, and Sheelit with the following values at the surface:

Bell Lab. Reports	Dates	Sample No.	Oz. Gold ton	Oz. Silver ton	%Pb	%Zn	Tungsten (%W)
# 3077	6/10/53	Notag	Nil	9.88	1.22	1.14	
6527	9/16/53	2-A	Trace	12.76	2.19	.65	
~~5285~~ 9174	12/1/53	Notag					10.54

The shearzone has a strike of approximately Northeast-Southwest and dips to the Southeast at 50 degrees, and has been proved for a length of 500 feet, with plenty of quartz and schist float showing along the strike to the West for an additional length of well over 1200 feet.

~~The vein dips 60 degrees to the Southeast, 75 degrees at the~~ Northeast end.

CHAPMAN & CO., INC.
84 State Street
Boston, Massachusetts

SILVER, LEAD, ZINC PROSPECTS

LOCATION:
&
AREA

Property is comprised of approximately /600 acres, situated in the Town of Linneus, State of Maine, close to good highway, 2 1/2 miles from the Bangor & Aroostook Railroad, northern boundary of property on lake shore.

GEOLOGY
&
ORE

Granite, Orebody consists of strong shearzone in the Granite, from twelve to twenty feet wide, shot through with quartz veinlets and veins from a fraction of an inch to three feet wide. The full width of the zone is well mineralized with Iron Pyrites, Arsenopyrite, Galena and Zinc Blende, with the following values at the surface:

Sample No.	Oz. Gold ton	Oz. Silver ton	%Pb	%Zn
2-A	Trace	12.76	2.19	.65

The shearzone has a strike of approximately Northeast-Southwest and dips to the Southeast at 50 degrees, and has been proved for a length of 500 feet, with plenty of quartz and schist float showing along the strike to the West for an additional length of well over 1200 feet.

The vein dips 80 degrees to the Southeast, 75 degrees at the Northeast end.

The sediments are dipping 80 degrees to the East. The contact at the North end is about 700 feet to the East of the ore body dipping 80 degrees to the East. At the South end the contact is about 3/4 of a mile from the ore body.

CHAPMAN & CO., INC.
84 State Street
Boston, Massachusetts

SILVER, LEAD, ZINC PROSPECT.

Location: & AREA. Property is comprised of approximately 1600 acres, situated in the Town of Linneus, State of Maine, close to good highway, 2½ miles from the Bangor & Aroos took Railroad , northern boundary of property on lake shore.

GEOLOGY & ORE Granite, Orebody consis ts of strong shearzone in the Granite, from twelve to twenty feet wide, shot through with quartz veinlets and veins from a fraction of an inch to three feet wide. The full width of the zone is well mineralized with Iron Pyrites, Arsenopyrite, Galena and Zinc Blende, with the following values at the surface:

Gold - Trace - Silver 9.88 Oz.ton, Lead 1.22%, Zinc 1.14%.

Bell-Lab. Report Dated 6/10/53

The shearzone has a strike of approximately Fast-West and dips to the South at 50 degrees , and has been proved for a length of 400 feet, with plenty of quartz and s chist float showing along the strike to the West for an additional length of well over 1200 feet,

CHAPMAN & CO., INC.
84 State Street
Boston, Massachusetts

SILVER, LEAD, ZINC DEPOSITS

LOCATION & AREA

Property is comprised of approximately 800 acres, situated in the Town of Linneus, State of Maine, close to good highway, 2 1/2 miles from the Bangor & Aroostook Railroad, northern boundary of property on lake shore.

GEOLOGY & ORE

Granite, Geology consists of strong shearzone in the granite, from twelve to twenty feet wide, shot through with quartz veinlets and veins from a fraction of an inch to three feet wide. The full width of the zone is well mineralized with iron pyrites, arsenopyrite, galena and zinc blende, with the following values at the surface:

Well Sam. Reports	Dates	Sample No.	Au. Gold ton	Ag. Silver ton	Pb	Zn	Tungsten (WO3)
3077	2/10/53	Notag	Nil	2.88	1.22	1.14	
3327	2/10/53	2-A	Trace	10.70	2.10	.35	
~~3245~~ 9874	12/1/55	Notag					10.54

The shearzone has a strike of approximately northeast-southwest and dips to the southeast at 50 degrees, and has been proved for a length of 500 feet, with plenty of quartz and schist float showing along the strike to the west for an additional length of well over 1300 feet.

The vein dips 50 degrees to the southeast, 75 degrees at the northeast end.

CHAPMAN & CO., INC.
84 State Street
Boston, Massachusetts

FREE OPTION

To Harry A. Thwaites, of Hodgdon, in the County of Aroostook and State of Maine.

I, George D. Henderson, of Littleton, in said County, certify that I am the owner in fee simple, clear of incumbrances of certain lands in said Littleton, to wit, Lot No. 7, Range 1 and Lot No. 7, Range 2; that permission is hereby extended to you and your employees and agents, to enter upon said lands during a period of four years from this date, for the purpose of doing all work necessary to prove up ore body in said lands including stripping, trenching, test pitting and diamond drilling, and that I agree for myself, my heirs and assigns, to convey to you by good and sufficient warranty deed at any time during said four-year period any or all of said premises for the consideration of $125.00 an acre, in addition to a royalty to be paid to me, my heirs, executors, administrators and assigns, when ore production starts on said lands, of ten cents a ton of ore milled, to be paid annually on December 31, but not to exceed $30,000 in total royalty payments.

Witness my hand and seal at said Littleton this 12th day of April, 1954.

Geo D Henderson

ACCEPTANCE OF OPTION

To George D. Henderson, of Littleton, in the County of Aroostook and State of Maine.

I, Harry A. Thwaites, of Hodgdon, in said County, hereby accept your offer made April 12, 1954, to sell and convey to me certain lands in said Littleton, to wit, all or parts of Lot No. 7, Range 1 and Lot No. 7, Range 2.

Witness my hand and seal this 12 th day of April, 1954.

Harry A. Thwaites

* * *
*

Oakfield, Maine
March 20, 1953

To Harry A. Thwaites, of Houlton, Maine.

I, Roy Branscombe, of said Oakfield, am the owner in fee simple, clear of incumbrances, of certain lands in the town of Linneus, Maine, to wit, town lots A, B, 1, 2 and 3 in the 10th range of lots, and lots 1, 2 and 3 in the 11th range, which property I will sell and convey to you, or to any person or group of persons that you may designate, by good and sufficient deed for $16,000, upon condition that this offer is accepted by you in writing delivered to me on or before February 28, 1956, with the privilege in the meantime of entering upon said lands and doing all necessary work to find and prove up ore body, including stripping, trenching and diamond drilling.

All shore line on Lots A, B, and 1, Range 10 and Lot 1 and Lot 2, Range 11, to a depth of one hundred and fifty (150) feet from the water line is reserved by me, and not to be included in this option, excepting a length of shore line of two hundred (200) feet on Lot 1, Range 10, Northeast starting from mouth of brook on Lot 1, Range 10.

Witness my hand and seal the day and year first above written.

Roy Branscombe

* * *
*

O P T I O N

To Harry A. Thwaites, of Hodgdon, in the County of Aroostook and State of Maine.

I, Roy Branscombe, of Oakfield, in the County of Aroostook, am the owner of certain lots of land in Linneus, in said County, to wit, Town Lot No. 4, Range 10 and Town Lots No. 4 and 5, Range 11, which I agree to sell and convey to you or your assigns for $8,000 on or before February 28, 1956, with the privileges in the meanwhile of entering on said lots of land and doing all work necessary to find and prove up ore body, including stripping, trenching and diamond drilling, reserving to myself, my heirs and assigns the right to carry on wood cutting and lumbering operations on said land during the period when this option is in effect and to do all things necessarily incident thereto.

Witness my hand and seal this 9th day of December, 1953.

Roy Branscombe

ACCEPTANCE OF OPTION

To Roy Branscombe, of Oakfield, in the County of Aroostook and State of Maine.

I, Harry A. Thwaites, of Hodgdon, in said County, hereby accept your offer in writing made this date, to sell and convey to me Town Lot No. 4, Range 10 and Town Lots No. 4 and 5, Range 11, in Linneus, in said County, according to the terms therein stated.

Witness my hand and seal this 9th day of December, 1953.

Harry A. Thwaites

* * *

LEASE

This indenture made this second day of June 1954 between James M. Pierce, James C. Madigan and Marie D. Madigan, all of Houlton, Maine, hereinafter called the lessors, party of the first part, and Harry A. Thwaites of Hodgdon, hereinafter called the lessee, party of the second part, witnesseth as follows:

1. That for and in consideration of the sum of twenty five dollars per lot per year, which the said second party agrees to pay to the said first parties, on delivery of this lease and annually thereafter, as hereinafter set forth, said first parties do hereby give and grant unto said party of the second part the exclusive lease and privilege to enter immediately upon the following described parcel of land, situate in the Town of New Limerick, Aroostook County, Maine, to wit: Town Lot numbered 11 R. D, and to explore the same for minerals for the period of three years, immediately following the day first and above written, subject to the following terms and conditions:

A. There is expressly reserved from all of the above property any portion of the same which has been previously sold by the Lessors or their predecessors in title which deeds have now been recorded in the Aroostook Registry of Deeds in Houlton.

B. It is agreed and understood that stripping, trenching and diamond drilling methods may be employed by the Lessee, and that any actual damage shall be paid by the Lessee to the Lessors.

C. The Lessors also reserve all timber or pulpwood on the premises during the period of this lease until such time as the Lessee may exercise the privilege of purchase hereinafter set forth.

2. In consideration of the premises, it is also further agreed, by and between the parties hereto, that the said Lessee shall have the right and option to purchase the land and premises described herein upon the payment of five thousand dollars; a good and sufficient deed conveying all right, title and interest of the said Lessors to be delivered to the said Lessee upon the payment of the said consideration. It is further agreed and understood that the Lessee may exercise this option to purchase any time during the continuance of this lease, but before the expiration thereof, and that the Lessee shall notify the Lessors, by registered mail, of his intention to exercise said option to purchase at least thirty days prior to the expiration of this lease.

3. The Lessee does covenant to pay the rent as aforesaid, and to quit and deliver up the premises to the Lessors peacably and quietly at the end of the term aforesaid, and not violate any of the terms and conditions or covenants in this lease.

4. The Lessors agree that this lease with the option may be assigned by the Lessee, but subject to all the conditions and covenants for which the Lessee shall remain liable.

In Witness Whereof, the parties have hereunto set their hands and seals the day and year first above written.

Signed, Sealed and Delivered

in presence of

Lila Hanson ..... James H. [illegible]

Lila Hanson ..... James C. Madigan

Lila Hanson ..... Maria F. Madigan

Harry F. [illegible]

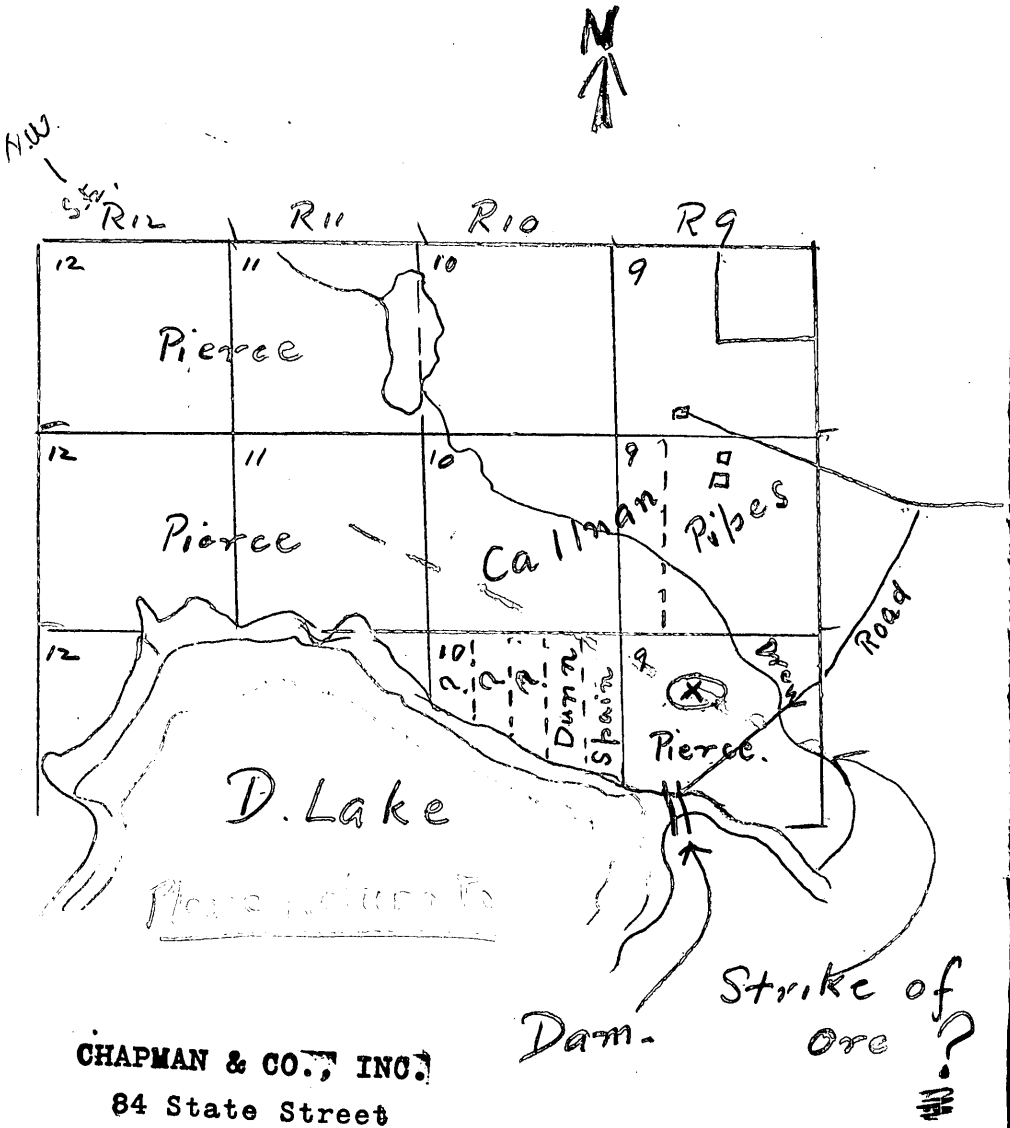
State of Maine, Aroostook ss. June 2, 1954

Personally appeared before me the within named James C. Madigan and acknowledged the within instrument to be his free act and deed.

Notary Public

New Limerick.

Scale ½ mile (40 Chns) to an inch.



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Boston, Massachusetts

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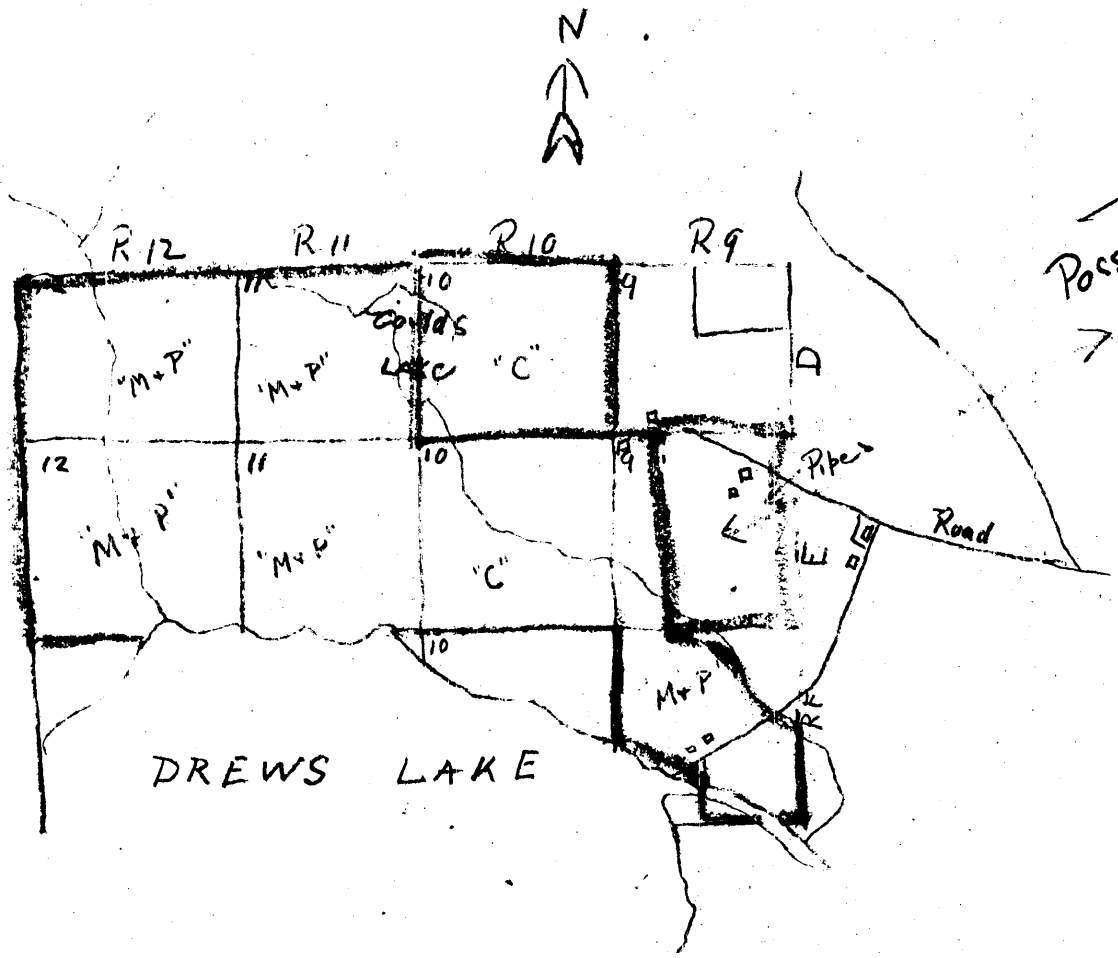
Boston, Massachusetts

Scale ½ mile (40chns) to an inch.

New Limerick.



Possibly this Lot too.
Farm

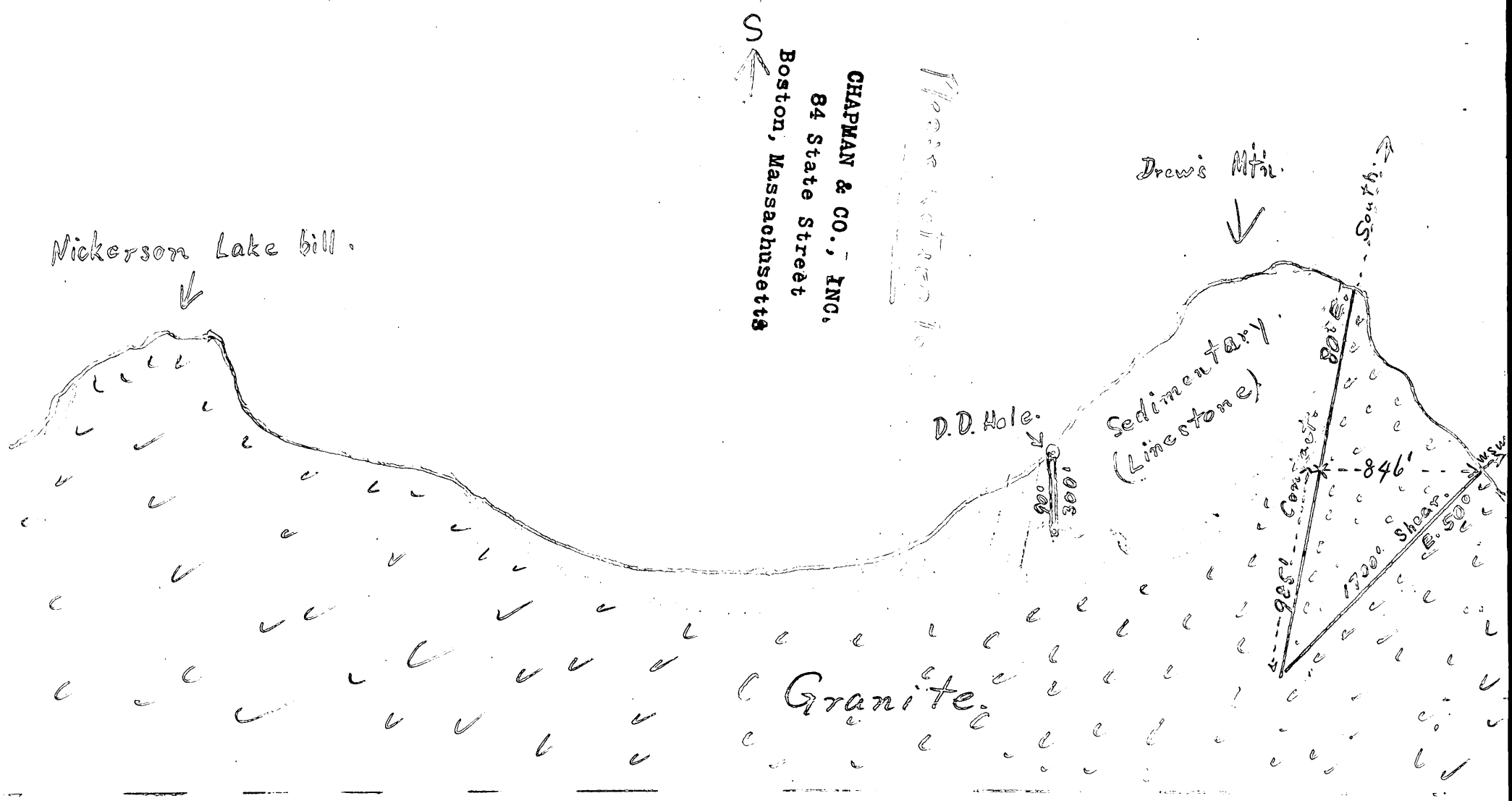
200' of shoreline on Cf Lake
~~[illegible]~~ on Bar Lot 1

depth 150

CHAPMAN & CO., INC.
84 State Street
Boston, Massachusetts

½ mile (40 chains) to inch.

Lines 3



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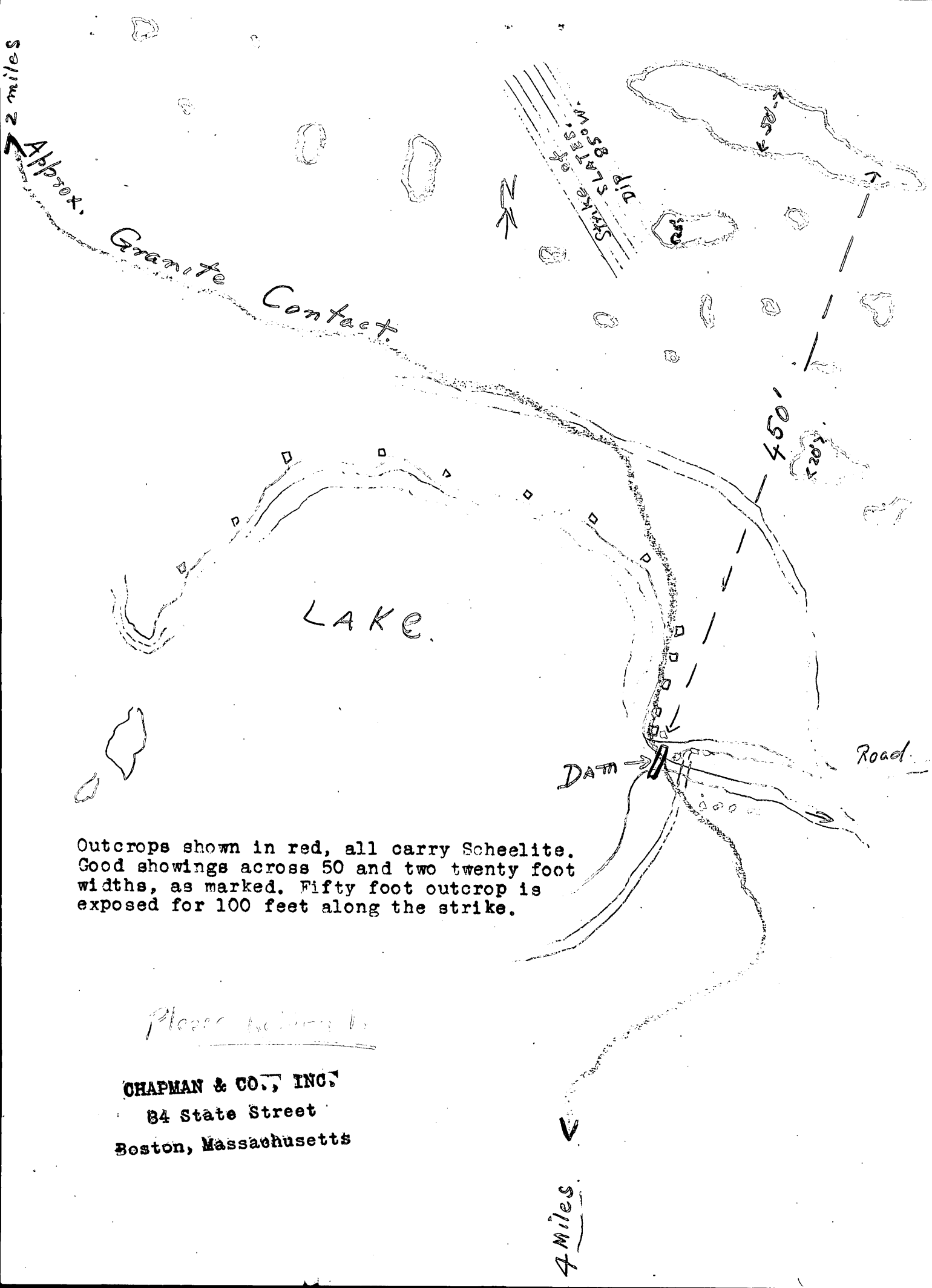
Boston, Massachusetts



Outcrops shown in red, all carry Scheelite. Good showings across 50 and two twenty foot widths, as marked. Fifty foot outcrop is exposed for 100 feet along the strike.

Please return to

CHAPMAN & CO., INC.
84 State Street
Boston, Massachusetts

OFFICIAL BUSINESS

[illegible] Bldg.
[illegible] House
[illegible] Street
[illegible] Pl., California

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