



PHONE: OFFICE 667-2819
RES. 668-2822
AREA CODE 403

R. G. HILKER
LIMITED
CONSULTING GEOLOGIST . . . PROFESSIONAL ENGINEER
P.O. Box 566
WHITEHORSE, YUKON TERRITORY
"LAND OF THE MIDNIGHT SUN"

Property Evaluation Report

on the

Jet Claim Group

Sheet 106-D-6

Latitude: 64° 10' N

Longitude: 135° 17' W

Gray Copper Hill Area

Mayo Mining District

Yukon Territory

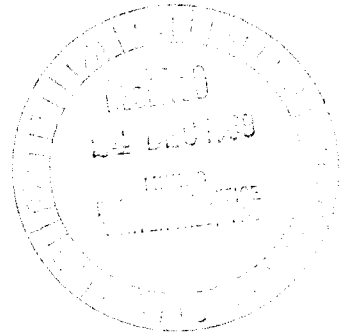
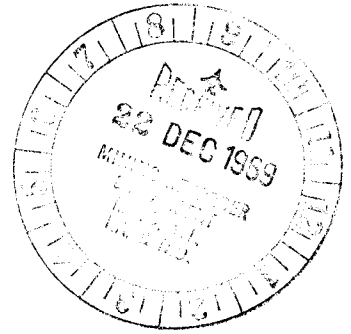
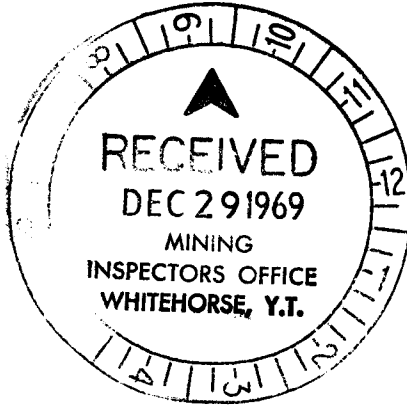
For

Mr. P. Versluce
Box 164
Whitehorse, Y.T.

By

R. G. Hilker, P. Eng.
Whitehorse, Yukon Territory

December 5th, 1969



This report has been examined by the Geological Evaluation Unit and is recommended to the Commissioner to be considered as representation work in the amount of

\$1,100

D. B. Craig
Geologist or
Registered Mining Engineer

Considered as representation work under Section 53 (a) Yukon Quartz Mining Act.

[Signature]
Commissioner of Yukon Territory

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INTRODUCTION

On June 29th, 1969, the writer, accompanied by P. Versluis, conducted a property examination of the mineralized area on the north slope of Grey Copper Hill. The area examined is covered by the Jet 1, 2, 3, 5, 9, 11, 12, 13, 14, 15 and 16 claims.

LOCATION AND ACCESS

The Jet Claim Group is located on the north slope of Grey Copper Hill in the Mayo Mining District. The claims are on Sheet 105-D-6 in the vicinity of 64° 10' N and 135° 17' W. Grey Copper Hill is located 65 air miles NNE of Mayo, Y.T., and 40 miles N of Elsa, Y.T., in the general region of Police Creek, Carpenter Creek, and the Upper Beaver River. The hills of the general area are designated as being part of the Ogilvie Mountains.

Access at this time was provided by helicopter from Mayo, Y.T. The most practical means of access to the property is by helicopter, although old pack trails converge on the area from the vicinity of Keno City, Y.T.

HISTORY

In 1922, shortly following the Keno Hill discoveries, silver-lead deposits were formed on McKay Hill. Prospecting revealed that McKay Hill deposits were of low grade, but high grade deposits were discovered on Silver Hill and high grade float was discovered on Grey Copper Hill in 1923. W. E. Cockfield visited the area in 1923 and 1924, when he carried out a two month mapping program for the Geological Survey of Canada (Geological Survey of Canada, Summary Report 1923) & (Geological Survey of Canada, Summary Report 1924).

The only other mention of work in the area was found in Cockfield's (Geological Survey of Canada, Summary Report 1929), report on activities in the Yukon for the year 1929: "The Consolidated Mining & Smelting Company Limited, has for several years been developing a prospect on McKay Hill in this area, and surface work resulted in a very good showing of ore. During the summer of 1929, the property was diamond drilled, and it reported the the results were very disappointing, as it was found that the deposit did not extend to any reasonable depth. It is reported that the option held by this company has been abandoned."

LIST OF EMPLOYEES

The following persons participated in the property examination conducted by R. G. Hilker, L.P.W. Eng. on July 29th, 1969:

R. G. Hilker
P.O. Box 566
Whitehorse, Y.T.

Geologist

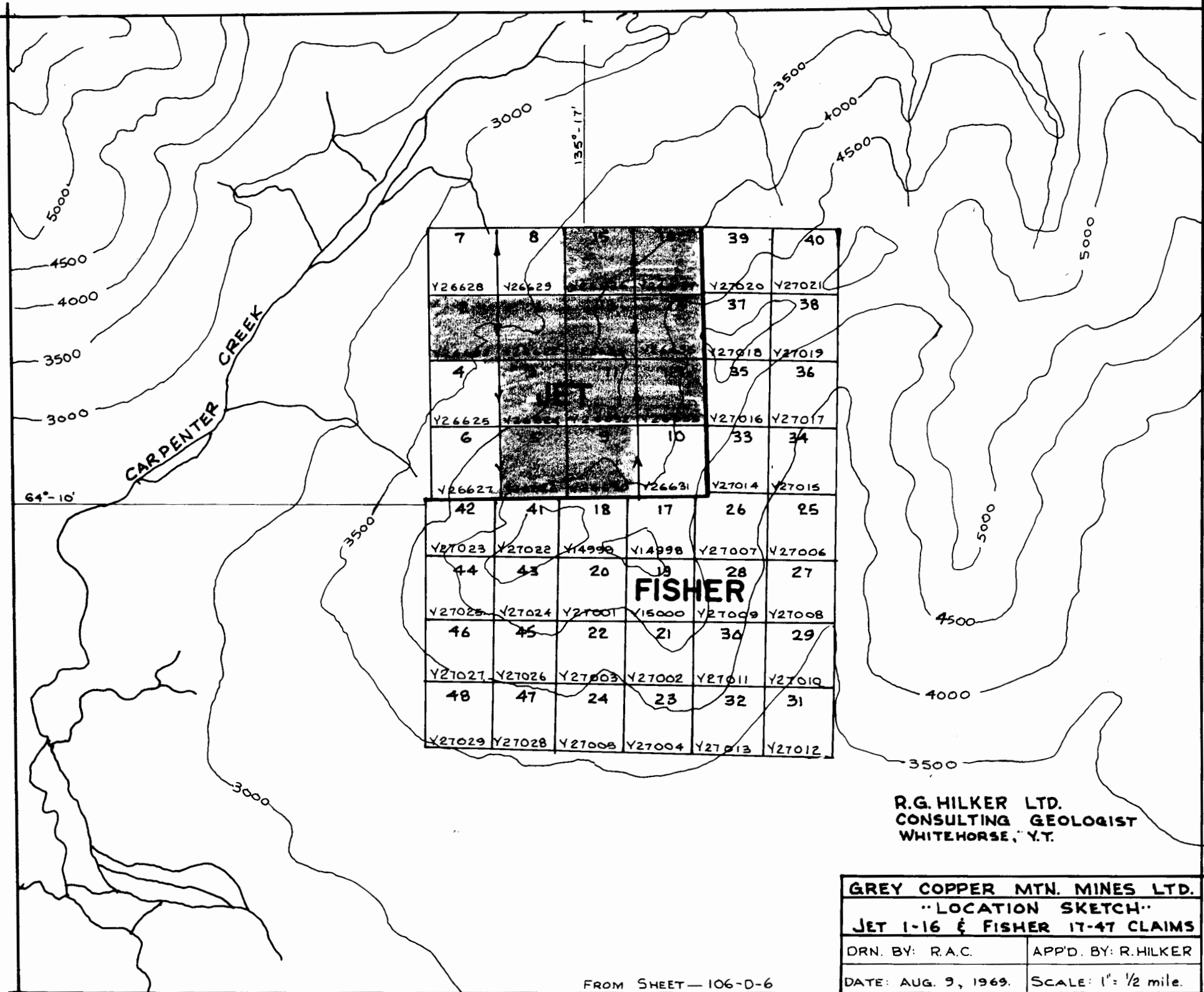
P. Versluce
Box 164
Whitehorse, Y.T.

Geological Assistant

CLAIMS

The following claims are held in good standing on Grey Copper Hill. (Sheet 106-D-4; Mayo Mining District):

<u>CLAIM</u>	<u>GRANT NO.</u>	<u>ANNIVERSARY DATE</u>	<u>OWNER</u>
Jet 1	Y26622	July 25th, 1969	H. Versluce
Jet 2	Y26623	July 25th, 1969	H. Versluce
Jet 3	Y26624	July 25th, 1969	H. Versluce
Jet 5	Y26626	July 25th, 1969	H. Versluce
Jet 9	Y26630	July 25th, 1969	H. Versluce
Jet 11	Y26632	July 25th, 1969	H. Versluce
Jet 12	Y26633	July 25th, 1969	H. Versluce
Jet 13	Y26634	July 25th, 1969	H. Versluce
Jet 14	Y26635	July 25th, 1969	H. Versluce
Jet 15	Y26636	July 25th, 1969	H. Versluce
Jet 16	Y26637	July 25th, 1969	H. Versluce



R.G. HILKER LTD.
 CONSULTING GEOLOGIST
 WHITEHORSE, Y.T.

GREY COPPER MTN. MINES LTD.	
"LOCATION SKETCH"	
JET 1-16 & FISHER 17-47 CLAIMS	
DRN. BY: R.A.C.	APP'D. BY: R.HILKER
DATE: AUG. 9, 1969.	SCALE: 1" = 1/2 mile.

REGIONAL GEOLOGY

Rock types in the general area include both sedimentary and igneous type with sediments predominating.

The sediments have been divided into three main groups : Precambrian (?) consisting of quartzite, slate, limestone, conglomerate, calcareous sandstone and argillite; Palaeozoic - consisting of volcanic agglomerate, shale, sandstone, and limestone; and Quaternary - consisting of recent superficial deposits.

The igneous types have been divided into two main groups - augite andesites (greenstone) and augite diorites, both dated as being upper Palaeozoic.

ECONOMIC GEOLOGY

The following description of Grey Copper Hill was given by W. E. Cockfield (Geological Survey of Canada, Summary Report 1924) in Bostock (Memoir 284, pages 538 - 539):

"Grey Copper Hill is situated 4 miles north of the mouth of Carpenter Creek. The discovery, by R. Fisher, in the autumn of 1923, of rich tetrahedrite float on this ridge, led to a stampede to the district during the winter of 1923-24. About fifty claims were staked, most of them being located on the snow. Only the assessment work required to hold them was done during the summer of 1924.

Only one mineral vein was noted, but float from one or more other veins was observed. The available evidence indicates that the deposits are tetrahedrite-pyrite-siderite veins somewhat similar in type to those occurring on Keno Hill, except that galena is an important constituent of veins on Keno Hill, whereas no galena was noted on Grey Copper Hill.

The only visible vein noted occurs on the discovery claim - the Grey Copper King. This vein outcrops in a small canyon in a gulch on the western face of the hill, a few hundred feet above timber-line. It is partly exposed in a small open-cut on the northern side of the canyon. Along the strike of the veins, rock exposures are wanting on the opposite side of the gulch and no attempt has been made to discover if the vein continues in this direction. The vein occupies a fault fissure striking north 10 degrees west and dipping 78 degrees to the southwest. It is not exposed for its full width, which is estimated to be 24 to 30 inches. The vein-filling consists of siderite, tetrahedrite, and pyrite with some quartz, azurite, and malachite. The siderite makes up by far the greater part of the deposits and is coarsely crystalline and of a light brown colour.

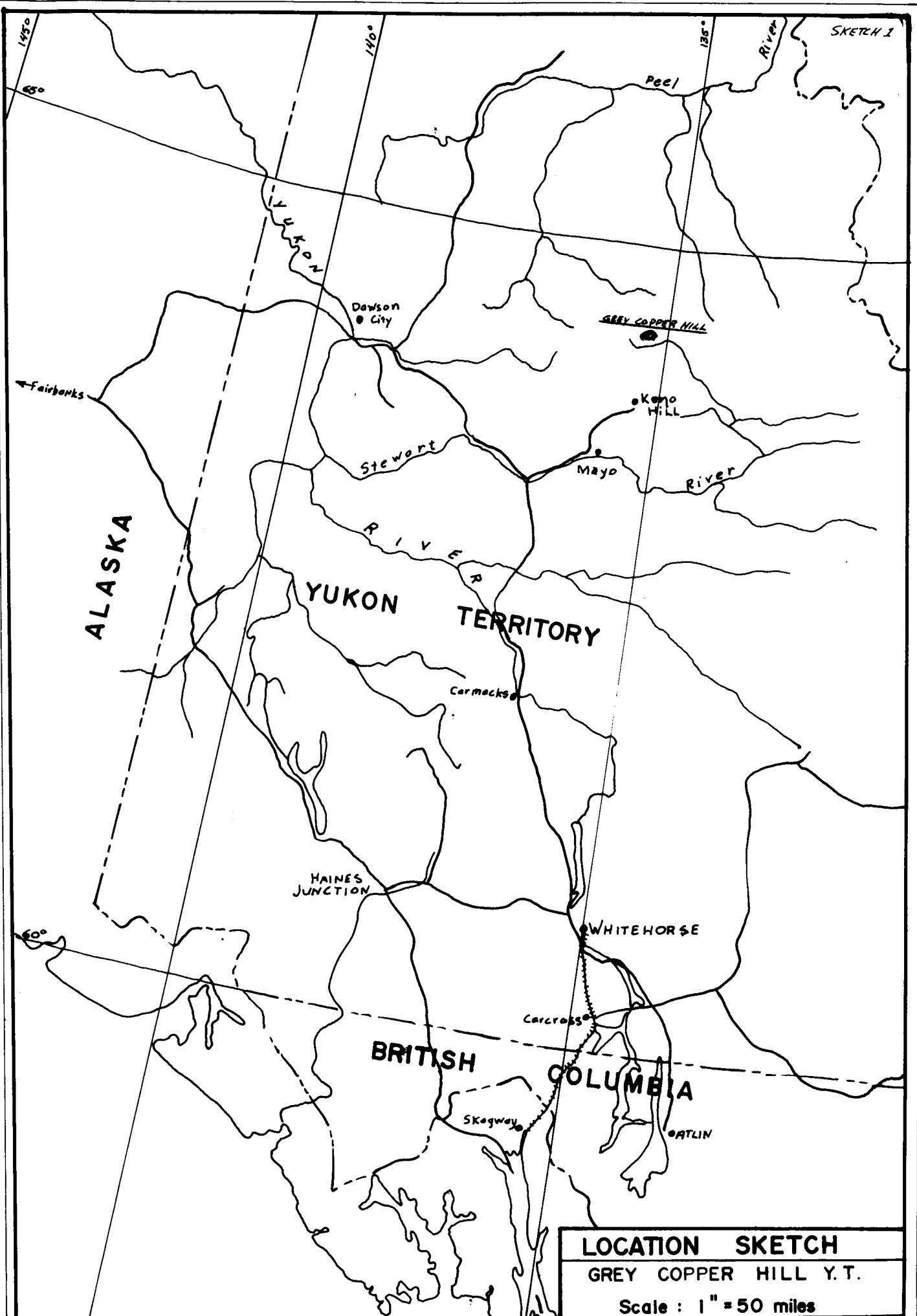
Tetrahedrite and pyrite are scattered through the siderite in small specks and bunches. A sample of the 16 inches of the vein exposed was taken, and assayed 52.0 ounces of silver to the ton.

The second discovery in Grey Copper Hill consists of float only and was also made by R. Fisher. It lies on the King Tut claim, towards the head of the gulch already referred to. On this claim, owned by R. Fisher, and the adjoining Silver Queen, owned by L. B. Erickson, siderite float has been found. Occasional lumps of fairly pure tetrahedrite carrying up to 1,100 ounces of silver to the ton have been picked from this float, but none was observed by the writer although a careful search was made. The bedrock of the gulch at this point is wholly covered by a thick accumulation of frozen talus, and this, in addition to a large snow drift which remained most of the summer, prevented the prospectors from sinking their trenches to bedrock during the past season. A body of siderite about 20 feet long and of unknown thickness was noted in place on the southern side of the gulch. There can be little doubt that a concealed siderite-pyrite-tetrahedrite vein crosses these properties, and that the tetrahedrite carries high values in silver, but the position and course of the vein, its width, and the character and value of its ore-shoots, must remain unknown until further prospecting has been done.

On some of the other claims, quartz and siderite float have been discovered, but to date the veins from which this came have not been located."

The writer examined the old workings and found two slightly mineralized quartz veins. The vein exposed in a pit near the heliport consisted of iron stained quartz containing siderite, chalcocite, sphalerite and chalcopyrite.

The vein was found to have a chloritic schist hanging wall and a greenstone footwall. Approximately 2,000 feet east of the aforementioned pit, an adit was driven on a milky quartz vein in brown quartzite. The vein strikes NW - SE and dips vertically.



LOCATION SKETCH
 GREY COPPER HILL Y.T.
 Scale : 1" = 50 miles

cabin □

■ PIT (10'x10'x 4' deep)

× heliport

*greenstone
chloritic schist*



TRAIL

quartz vein

+ old claim posts

□ cabin

CREEK

R.G. HILKER Ltd.
CONSULTING GEOLOGIST
WHITEHORSE, Y.T.

OLD WORKINGS

GREY COPPER HILL-MAYO DIST.

Scale : 1" = 400' - SHEET 106-D-6

CONCLUSIONS

Documented reports of tetrahedrite float carrying very high (to 1,100 oz./ton) silver values indicate the possibility of there being an economically significant silver deposit in the area. Examination of the property revealed two veins and the presence of other favourable structures is strongly suspected.

RECOMMENDATIONS

A detailed program, primarily based on a geochemical survey, is recommended for the area. Grid control should be established for a sampling program and the resulting samples should be analyzed for copper and silver. Geological mapping should be carried out over the grid area in conjunction with the geochemical survey.

COST ESTIMATE ON RECOMMENDED WORK

Geochemical Survey	\$10,000.00
Geological Mapping	5,000.00
Grid Control	3,000.00
Assaying	500.00
Transportation	5,000.00
Camp and Expediting	3,000.00
Geological Consulting	<u>3,000.00</u>
TOTAL	<u><u>\$29,500.00</u></u>

STATEMENT

P. VERSLUCE

WOOD DEALER AND GENERAL HAULING

Box 164

WHITEHORSE, Y.T.

DATE, 7/11/30 1930

Camp Collier A-510 J
Alaska Camp

DATE	CHARGE	CREDIT	BALANCE
	TO BALANCE ACCOUNT RENDERED		
<u>Jan 29-30</u>			
<u>Rental Truck</u>			
<u>Whitehorse - Kas. Camp</u>			
<u>and return</u>			
<u>100 miles @ \$0.18</u>			
<u>per mile</u>			<u>18.00</u>

Desmarault + Versluis Bros/feeling - Current Account

Bank of Montreal

Whitehorse, Yukon.

Cheque No.

Date

Oct 29 / 69

\$ *602.00*

Pay to the order of

United Helicopters

Six Hundred and two ————— *00* Dollars

Gray Copper Hill Trip

P. Versluis
Desmarault

⑆09980⑆00⑆1⑆

**UNITED
HELICOPTERS**

HANGER No. 4
McCALL FIELD
CALGARY 67, ALTA.

P.O. BOX 232
WATSON LAKE
YUKON

DATE OF INVOICE

INVOICE No.

IN ACCOUNT WITH

Gray Copper Hill
P.O. Box 1858
Whitehorse Y.T.

NET CASH ON RECEIPT OF INVOICE
TERMS

DATE	TICKET No.	AIRCRAFT	HOURS	RATE	AMOUNT
June 29	0180	CF-YJI	4.3	140.00	\$602.00

A. H.

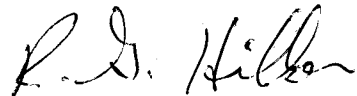
TOTAL

\$602.00


I, R. G. HILKER, do hereby swear that the following expenditures were incurred on the Jet Claim group of mineral claims, Sheet 106-D-6, Mayo Mining Division.

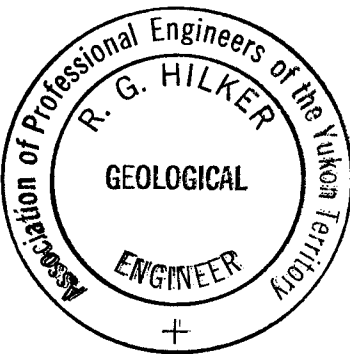
United Helicopters -----	\$602.00
Transportation, Truck -----	120.00
P. Versluce, geological assistant June 28th & 29th -----	80.00
Property Examination & Report R. G. Hilker Limited -----	400.00
	<hr/>
	\$1,202.00

Dated at Whitehorse, Y.T.
on December 5th, 1969.



R. G. Hilker


R. E. ARCHIBALD.
A Chartered Accountant for Yukon Territory
in and for the Yukon Territory.



CERTIFICATION

I, R. G. HILKER of #6 Chalet Crescent Hillcrest, in the City of Whitehorse, in the Yukon Territory, DO HEREBY CERTIFY:

1. THAT I am a Consulting Geologist, with an office located at #8 Northern Metallic Building and Postal address P.O. Box 566, in the City of Whitehorse, in the Yukon Territory.
2. THAT I am a graduate of Michigan Technological University located in Houghton, Michigan, U.S.A., where I obtained a Bachelor of Science degree in Geological Engineering (Exploration Option) in 1962.
3. THAT I am a registered member in good standing of The Association of Professional Engineers of the Yukon Territory and am registered with a non-residence license in The Association of Professional Engineers of the Province of British Columbia.
4. THAT I have practiced my profession as an engineer and geologist for the past seven years.
5. THAT I have personally examined the Jet claim group located in the Mayo Mining Division of the Yukon Territory on June 29th, 1969.
6. THAT I have no direct or indirect interests in any of the mineral claims, or in any of the securities held by Grey Copper Mines Ltd. (N.P.L.), nor do I expect to receive any.

Dated this 5th day of December, A.D., 1969.

