

RUTH GROUP
Watson Lake Mining Division, Y.T.
N.T.S. 105B9

For

J. MELNYCHUK & ASSOCIATES

By

A.S. Ashton, P. Eng.

February 11, 1970

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

\$450.00

A.S. Ashton
A.S. Ashton, P. Eng.

Considered under Section 83 (1) of the Mining Act.

[Signature]
Commissioner



TABLE OF CONTENTS

	<u>Page</u>
INTRODUCTION	1
LOCATION & ACCESS	1
PROPERTY	1
LOCATION MAP	1-A
TOPOGRAPHY	2
GENERAL GEOLOGY	2
PROPERTY GEOLOGY	3
SHOWINGS	3
CONCLUSIONS & RECOMMENDATIONS	5
PROPOSED COSTS	6
CERTIFICATE OF QUALIFICATIONS	Rear
MAP	Rear

INTRODUCTION

On October 21st, 1969, in company with Mr. Tom Flint, the author examined the Ruth Group of Claims straddling the Black River near its junction with the Liard River, in the Yukon Territory.

Several showings and trenches were examined and sampled. Inclement weather prevented more than one day being spent on the property.

LOCATION & ACCESS

The Claim Block is located approximately one mile north of the junction of the Black River and the Liard River, and straddles the Black River. It is approximately 60 miles north-west of Watson Lake, Yukon Territory. The Group is situated in the Watson Lake Mining Division.

Access to the Group can be made by shallow draught boat up the Liard River to the junction of the Black River or by aircraft, both float plane or helicopter from Watson Lake, some 60 miles to the south-east. A winter road from mile 691 on the Alaska Highway passes along the north-east bank of the Liard River near the property.

PROPERTY

The Group consists of 24 contiguous claims, recorded with the Mining Recorder at Watson Lake in October, 1969 and are as follows:

Ruth 1 - 16 inclusive Y-41619 - 34 inclusive
Ruth 17 - 24 inclusive Y-41651 - 58 inclusive

All Claims are situated in the Watson Lake Mining Division, and are under the control of J. Melnychuk and Associates.

TOPOGRAPHY

The area of the Claim Group is part of the Liard Plain, and as such has an elevation of about 2500' A.S.L. In general, it is an area of gentle relief. The Black River channel, which traverses the Claim Block, is incised about 100' into the plain and yields the best rock exposures. Vegetation is extensive, primarily small pine trees with its associated undergrowth and alders and poplars near and adjacent to water channels.

GENERAL GEOLOGY

The Claim Block lies between the Tintina Fault on the north-east and the Twin Lake Valley Fault, part of the Rocky Mountain trench system, to the south-west. The general area appears to be the terminal area for these fault systems, and it is suspected that the Black River also is associated with a fault zone.

In general, the area is underlain by a series of Cambrian to Ordovician sedimentary rocks. These rocks are thin-bedded, light to dark limestones, dolomite, argillites and phyllites. Generally, because of the complexity of the structure, indicated bedding and schistosity planes are locally very variable. The general trend, however, is to the north-west.

Outcrop is sparse on the Liard Plain, and the rocks are generally overlain by variable amounts of glacial till.

PROPERTY GEOLOGY

Outcrop on the property is primarily concentrated along the banks of the Black River and its tributaries where there has been sufficient erosion to expose the bedrock. Except for the 'opened' exposures of siderite, the only bedrock exposed is broken, contorted, black, very thin-bedded phyllites. Due to the incompetency of these rocks, it is difficult to obtain a strike or dip of the bedding. In the north-west section, two granite plugs are seen to rise above the general terrain.

SHOWINGS (See Attached Map)

Area #1 - Consisted of several pits, only one which was not caved. This pit is about 5 feet long, 4 feet wide and 3 to 4 feet deep. Exposed was a siderite zone carrying disseminated chalcopyrite and some minor quartz, and/or calcite stringers. A random chip sample across 5 feet indicated a value of 0.52% copper. Across a small creek, to the south, a distance of approximately 200 feet, another partially caved trench indicated more siderite with disseminated chalcopyrite. A few random pieces of siderite taken from the dump of this pit gave a value of 0.21% Copper. When taking the pieces of siderite from this showing, obvious good grade samples were omitted, and consequently the assay is probably lower than the average tenure of the rock. Extending southward from here, several caved trenches in siderite were visible. The wall rock is phyllite and several quartz and calcite stringers were noted, extending from the siderite

SHOWINGS (cont'd.)

zone into the phyllites. For the most part these stringers carried some copper mineralization, generally chalcopyrite and one chalcocite stringer 1/8" wide was noted.

This zone of stringers extends for 200 to 300 feet down the river.

Area #2 - This showing which is on the west bank of the Black River, approximately 1/2 to 3/4 of a mile above the Area #1. The exposed showing here is of siderite, which has been stripped over a distance of 110 feet with a minimum exposed width of 18 feet. Where examined, the siderite showed disseminated chalcopyrite. About 12 feet from the west edge of the exposure, a 5 foot wide shear strikes 315° and dips 50° to the S.W. From the shear, the siderite is exposed for another 13 to 15 feet but has badly caved. Random float pieces in the area of cave indicated disseminated chalcopyrite in the siderite.

A conservative chip sample across 12.5 feet of the west side of the exposure indicated 0.10% Copper, while a 5 foot sample of the leached shear zone only indicated a trace.

Area #3 - At this location an area of siderite about 4 feet by 5 feet rises above the overburden of a steep hillside. This showing is on the Claim line between Ruth 7 and 8 about 800 feet N.E. of the Black River. The outcrop is well rounded and indicates disseminated chalcopyrite and chalcopyrite-bearing calcite stringers. No work has been carried out on this showing. A series of random chips,

SHOWINGS (cont'd.)

where they could be obtained, gave a value of 1.38% Copper.

No estimate of size could be made in this location nor any strikes or dips.

Due to the snow conditions, it was not possible to view other showings.

CONCLUSIONS & RECOMMENDATIONS

The property warrants a thorough investigation. To date, the size of the siderite zones is unknown and their relationship to the granite intrusives and phyllites has not been determined. Wherever the siderites were exposed, disseminated chalcopyrite was seen and it is felt that zones of higher concentration will be found as more work is carried out. It is suggested that a programme of line cutting and a magnetometer survey be carried out. In conjunction with this, more claims should be staked to the north-west.

A magnetometer survey should aid in outlining the favourable siderite host rock and indicate any widening or changes of strike. These lines could be used later in the season for systematic soil-sampling to further explore the potential of the property.

It is suggested that the best way to sample the present known showings is with a 'Pack-Sack' type drill. Because of the unstable ground (clay and/or phyllite), the trenches are continually caving. A series of short angle holes across these known zones would give both a good core for assaying and an indication of the width of the mineralized zones.

PROPOSED COSTS

Staking additional 100 Claims for extensions and protection @ \$50.00 per Claim	\$ 5,000.00
Line cutting - 3000' lines on 400' spacing for distance of 7500' - 13 Mi. @ \$100.00/Mi.	1,300.00
Magnetometer - 13 Mi. @ \$75.00/Mi.	975.00
Geochemical Survey:	
Sample collection - 13 Mi. @ \$50.00/Mi.	650.00
Assaying 650 samples - 1 determination	660.00
Pack-Sack drilling - 500 ft. @ \$5.00/ft.	2,500.00
Assaying - 100 samples for Cu @ \$3.00 per sample	300.00
Transportation (From Watson Lake to Property)	1,000.00
Engineering	1,500.00
Contingency Fund	1,115.00
TOTAL	<u>\$ 15,000.00</u>

Note: Costs are based on the owners carrying out their own work and consequently no mobilization or head office expense is added.

Respectfully submitted,



A.S. Ashton, P. Eng.

BULLIS ENGINEERING LTD.


February 10, 1970

DELTA, B.C.

CERTIFICATE OF QUALIFICATIONS

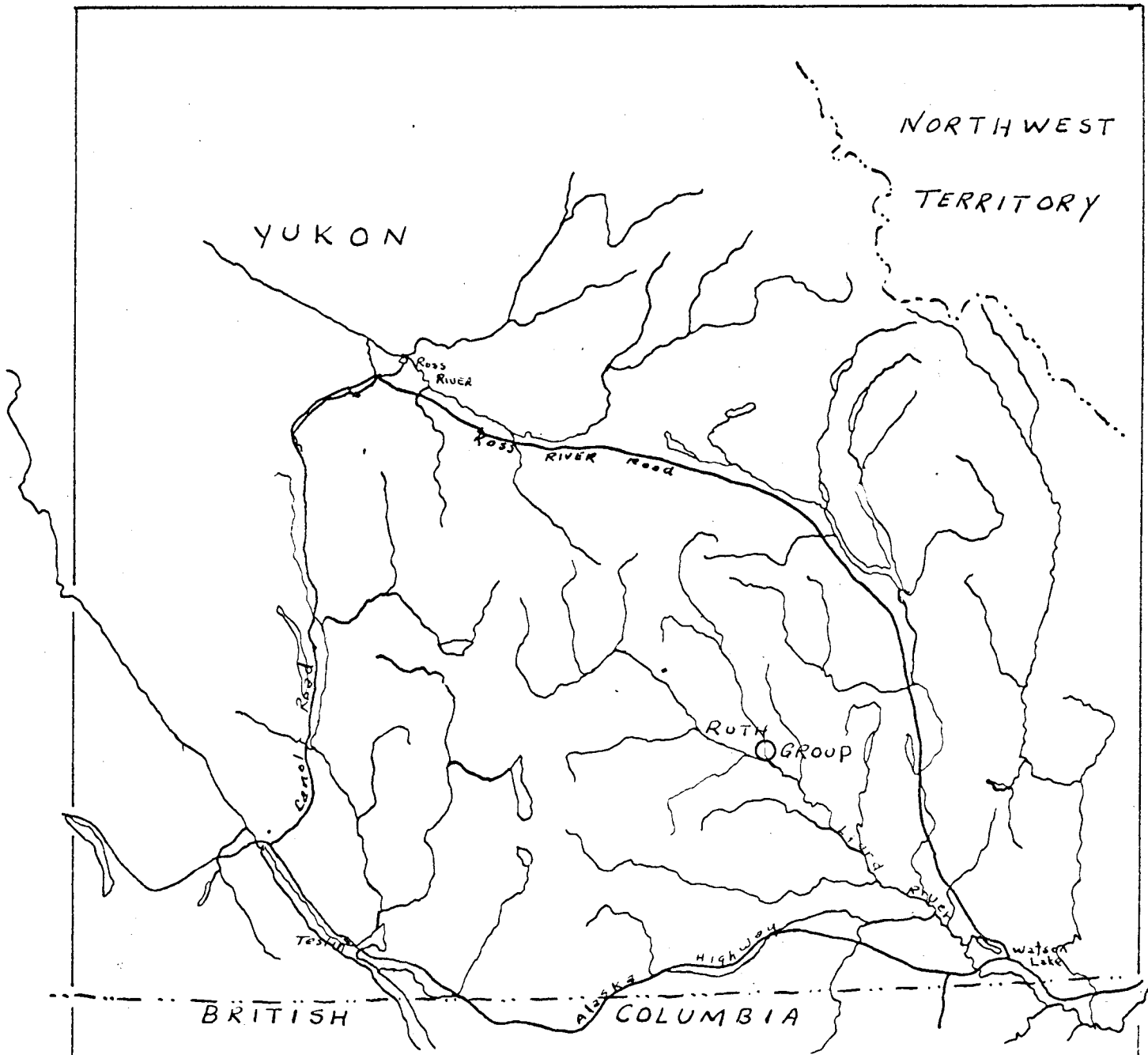
I, Arthur Sydney Ashton do hereby certify that:

1. I am a practising geological engineer with residence at 5441 7B Avenue, Delta, B.C.
2. I am a graduate of the University of Toronto and have been granted a degree of Bachelor of Applied Science.
3. I have been practising my profession as a geological engineer for twenty years.
4. I am a member of the Association of Professional Engineers of British Columbia and of the Association of Professional Engineers of Ontario.
5. This report is based on general knowledge of the area and a visit on October 21, 1969, to the property.
6. I have no interest, directly or indirectly, in the properties or securities of J. Melnychuk & Associates.


A.S. Ashton, P. Eng.

February 10, 1970

DELTA, B.C.



BULLIS ENGINEERING LTD.

LOCATION MAP

RUTH GROUP

Watson Lake Mining Division, Y.T.
N.T.S. 105B9

For

J. MELNYCHUK & ASSOCIATES

Scale 1 in - 32 Mi. February 11, 1970

CANADA) IN THE MATTER OF A GEOLOGICAL REPORT
)
YUKON TERRITORY) ON THE RUTH GROUP OF MINERAL CLAIMS.
)
TO WIT:)

I, Harold S. Aikins,
of, 715 - 850 West Hastings Street,
Vancouver 1, B.C.

HEREBY MAKE OATH AND SAY AS FOLLOWS:-

That attached hereto, this my Affidavit, marked
Appendix "A" and "B" respectively is a list of personnel
employed in the performance of the work and a statement of
the costs incurred for this work which I certify to be
correct to the best of my knowledge and belief.

SWORN before me at the)
)
City of Vancouver,)
)
Province of British Columbia,)
)
this 14th day of October)
)
A.D. 1970.)

H.S. Aik →

Jean Scobie
NOTARY PUBLIC IN AND FOR
THE YUKON TERRITORY

APPENDIX "A"

Geological Report - Ruth Group

"Statement of Expenditures"

IN ACCOUNT WITH

BULLIS ENGINEERING LTD.

5215 SARATOGA DRIVE

LADNER, B.C.

TELEPHONE: 943-4541

10th February, 1970

TO ACCOUNT RENDERED

J. Melnychuck & Associates, c/o S. Aiken,
P.H. Sevensma Consultants Ltd.
850 West Hastings, Vancouver, B.C.

Report on Ruth 1-24, Watson Lake Mining Division Y.T.

by A.S. Ashton, E. Eng.

\$ 450.00

*Paid in full
July 6/70*

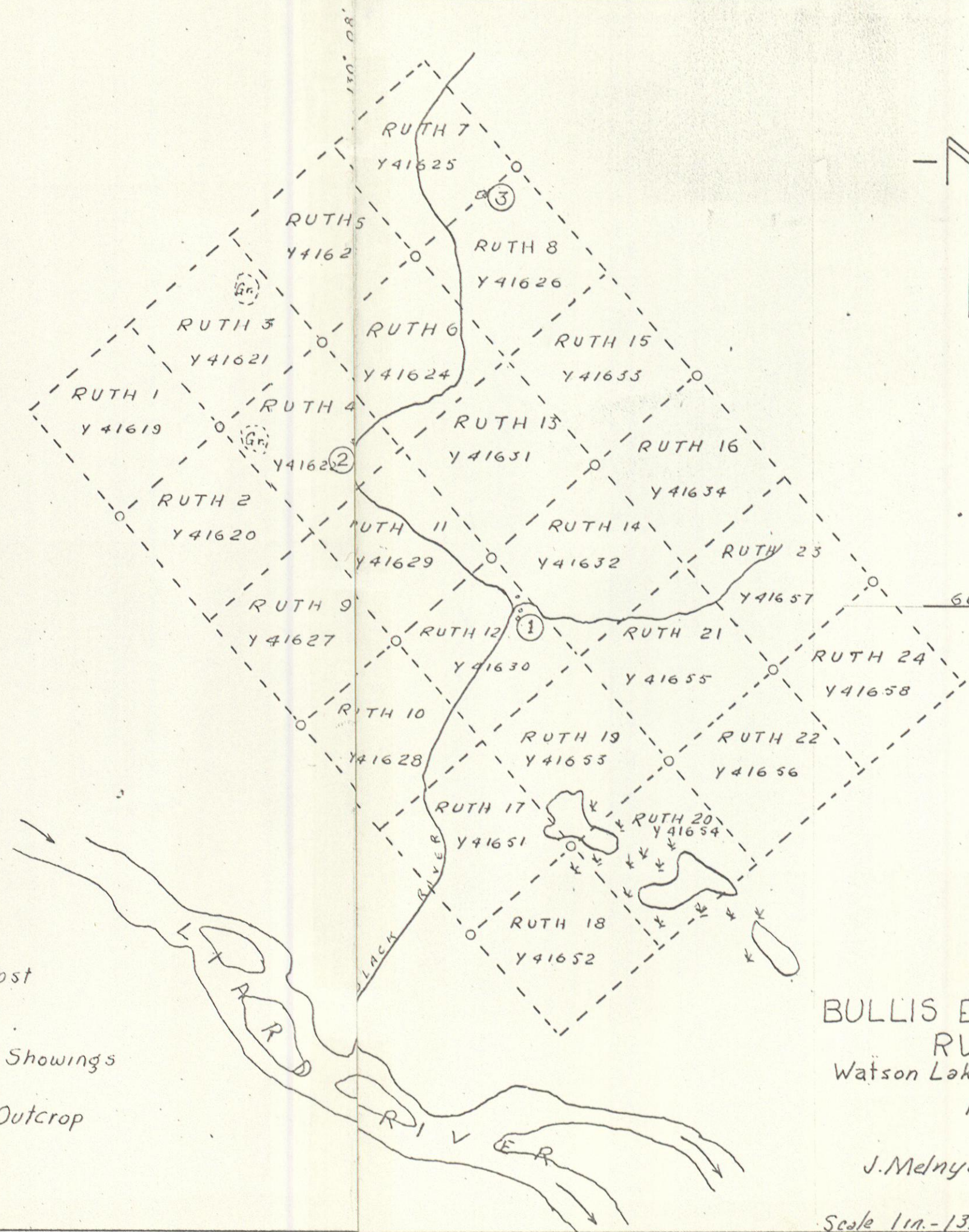
APPENDIX "B"

Geological Report - Ruth Group

"List of Personnel Employed"

Mr. A. Ashton, Geologist, P.Eng.
c/o Bullis Engineering Ltd.

Mr. T. Flint, Prospector,
c/o Wye Lake Resources Ltd.,
P.O. Box 350,
Watson Lake, Yukon Territory.



LEGEND

- Claim Post
- x Swamp
- ② Area of Showings
- Gr. Granite Outcrop

BULLIS ENGINEERING LTD.
 RUTH GROUP
 Watson Lake Mining Division Y.T.
 105 B 9
 for
 J. Melnychuk Associates
 Scale 1 in. = 1320 ft. Feb 11, 1970.