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This report has been examined by the Geological Evaluation Unit. Approved as to technical worth by:

RESIDENT GEOLOGIST

Approved as to cost in the amount of: $ 6225

RESIDENT MINING ENGINEER

Accepted as representation work under Section 53(4) Yukon Quartz Mining Act.

~~COMMISSIONER OF YUKON~~ Administrator

A GEOLOGICAL REPORT ON THE ASH CLAIMS FROM 1 -36 INCLUSIVE, FIRE LAKE AREA, YUKON

By T.L. Sadlier Brown

Sheet 105-G-2
61°14' N. Lat, 130°35' W. Long.

June 10 to June 30, 1966

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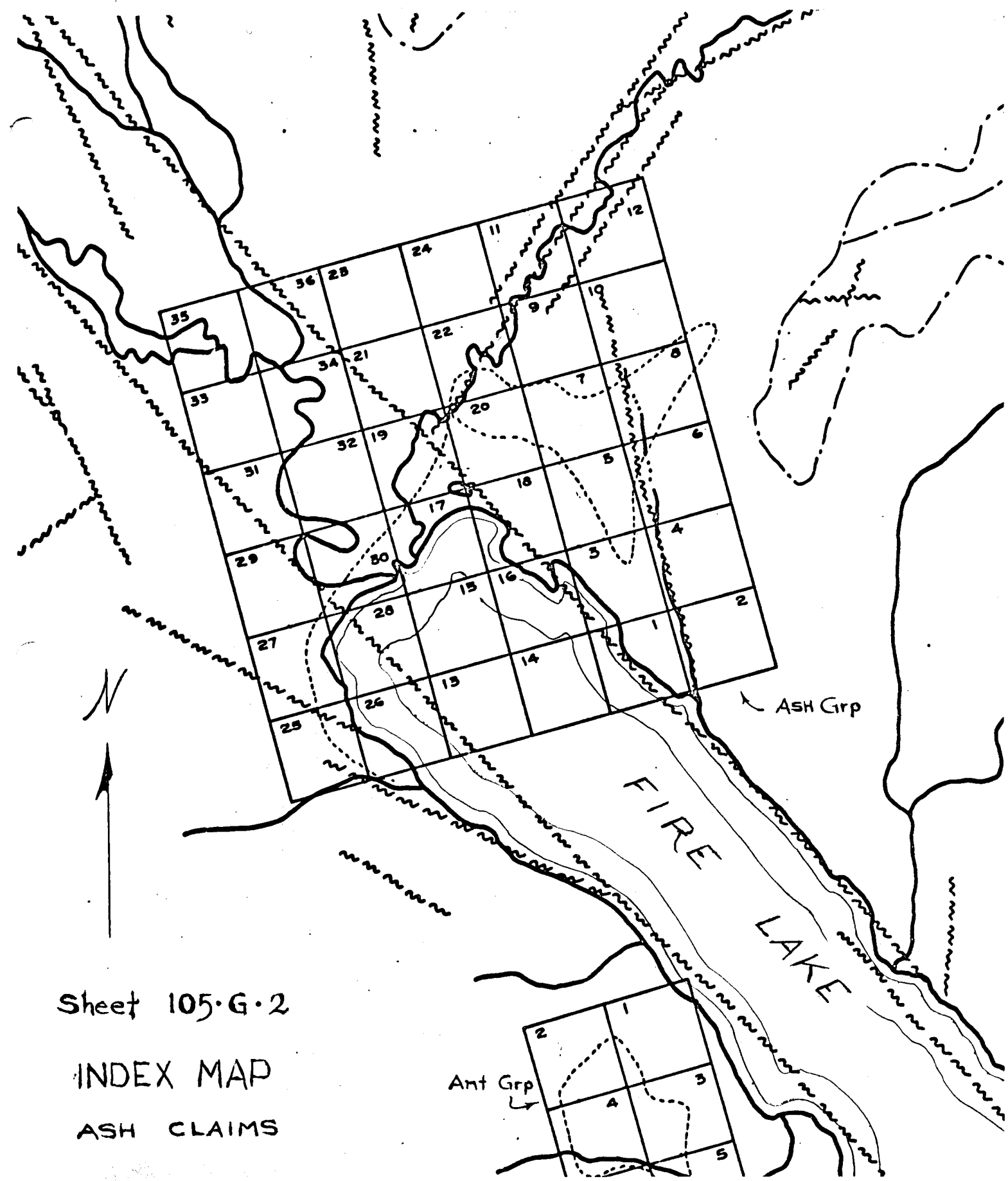

Sheet 105·G·2

INDEX MAP

ASH CLAIMS

INTRODUCTION

The Ash group consists of 36 contiguous claims bordering the northwest end of Fire Lake, Yukon Territory at 61°14' N. Lat. and 130°35' W. Long on NTS sheets 105-G-1 and 105-G-2. Staking was carried out during March and April of 1966 after an airborne EM and magnetometer survey detected an anomaly just north of the lake. The property is presently held by Atlas Explorations Limited of 355 Burrard Street, Vancouver 1, B.C., in whose interest the airborne survey was carried out.

During May and June of 1966 a field party, under P. Neilsen of Vancouver, B.C., carried out a complete survey of the claim group. A grid was cut from a base line striking at 345° through the middle of the property. Cross line spacings were 400 feet and pickets were placed every 100 feet. An EM survey using a Crone J.E.M. unit and a magnetometer were started early in May. As soon as snow conditions permitted geochemical and geological surveys were begun. The geophysical and geochemical surveys are discussed in accompanying reports by J.S. Brock.

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LOCATION AND ACCESS

Fire Lake is situated midway between Watson Lake and Ross River and about thirty miles south of the road joining these two centres. Access during the present study was exclusively by aircraft although, for any large scale development work a winter road from the lake to the highway might be practical. Both fixed wing aircraft and helicopters were used, the latter being necessary as some of the work was done during break-up.

The work on the property was carried out from a camp about half way along the north shore of the lake. The claims may be reached by a poorly maintained trail leading northwest along the shore of the lake, or in times of low water, by merely walking along the beach, although a boat, built during the summer and kept at the camp is the best way. Part of the group is, at least in the spring, under water as it lies in a marshy area at the head of the lake. For this reason a rubber raft was found useful in crossing the many ponds and streams.

PHYSIOGRAPHY

The claims are located, generally speaking, in the valley of Fire Lake and on the mountain slope to the north of it. The terrain in the valley is reasonably level, though some irregularities caused by glacial debris and a possible raised beach do occur.

All of the claims are below tree level, with those on the mountainside being forested by spruce, balsam and buckbrush and those in the valley predominantly by buckbrush. Spruce and balsam and pine trees are, however, present in the valley, as are many grassy open areas.

Outcrop is fairly common on the sloping ground between the lake and mountain slope in the eastern part of

the claims but very scarce elsewhere. In the low area off the end of the lake there is none at all.

Overburden is probably all glacial except for some colluvial material on the lower part of the mountain slope. The glacial material consists of till with large transported boulders and at least one moraine, the boulder pile at 36 N 14-16 E.

Glacially transported rocks consist of granite, magnetite bearing peridotite, and mica schist, similar to the rock underlying the observable parts of the claim group.

Drainage over the builk of the area is generally poor with the western two-thirds of the group being almost inundated during the run off season. The eastern part of the area is drained by a few small streams which empty directly into Fire Lake or the creek entering it from the northeast.

GEOLOGY

Only on the eastern third of the claim group area is there sufficient outcrop to permit geological mapping. Fire Lake and a mantle of glacial material obscure the bedrock everywhere else.

The rocks occurring on the slope along the northeast shore of the lake are all essentially medium grained mica schists with varying amounts of quartz and sometimes a little hornblende. Euhedral red garnets were observed in it at one locality (44N, 28E) and many thin veins and interbeds of quartz are also present.

These schists are classed on the G.S.C. map of the area in unit A[1] for which no age is given. They have, however, been observed unconformably overlying unit C

i: Wheeler, Green and Roddick. G.S.C. Map 8-1960 Finlayson Lake.

which forms the precambrian basement complex in the area and correllation with rocks described on adjoining sheets suggests a mississipian age. [ii]

The rocks are generally well bedded with a uniform strike of 160 to 180 degrees and a gentle easterly dip of between 5 and 10 degrees. Some contortion occurs in a zone of abundant quartz banding and veining at about 20N, 24E, but this does not appear to be extensive.

Regional mapping and air photographs interpretation suggests the existence of a northwest striking fault zone in the valley of Fire Lake, but, as there is no outcrop in the area, this could not be confirmed on the ground. A straight, deep, north-south striking valley located about 3,000 feet east of the base line and at the bottom of the steepest part of the mountain slope is likely the expression of a fault zone although no evidence of faulting was observed in the rocks adjacent to it.

In spite of moderate geophysical and geochemical anomalies in the central and extreme eastern parts of the claim group, no mineralization of potential economic value was observed during the mapping. Outcrop though, is very scarce, if present at all, in the anomalous areas.

CONCLUSIONS AND RECOMMENDATIONS

The rocks on the claim group are recognized as favourable hosts for mineralization but, because none was observed, further work will be contingent upon favourable results from the geochemical and geophysical surveys.

ii: Smith, C. L. Personal Communication

EXPENDITURES INCURRED DURING GEOLOGICAL EVALUATION OF ASH GROUP

Salary:		
1 geologist @ $700/mo.	20 days in field 10 days in field	
Total:-	30 days	$700.00
Camp costs:		
1 man @ $12/diem	20 days	$240.00
Transportation:		
Fixed wing incidental traffic rate to Fire Lake from Ross River		$25.00
Helicopter - 2 hrs @ $130/hr. for transportation and brief reconnaissance		$260.00
TOTAL:		$1,225.00

I hereby certify that to the best of my knowledge the above is a true and accurate account of expenditures incurred during the geological examination of the Ash Claims.

T.J. Sadlier-Brown

T.L. Sadlier Brown
Geologist
Atlas Explorations Limited,
330-355 Burrard Street,
VANCOUVER 1, B.C.

BASE LINE

NORTH RIVER

FYRE LAKE

Ash 11/9 12/10

Ash 23/21 24/22

Ash 9/7 10/8

Ash 35/33 36/34

Ash 21/19 22/20

Ash 7/5 8/6

Ash 33/31 34/32

Ash 19/17 20/18

Ash 5/3 6/4

Ash 35/29 32/30

Ash 3/1 4/2

1A

88N 84N 80N 76N 72N 68N 64N 60N 56N 52N 48N 44N 40N 36N 32N 28N 24N 20N 16N 12N 8N 4N 0

N

LEGEND

Mica schist	1	Siliceous mica schist	1A
Outcrop area		Attitude of schistosity	
Pond		Stream	

SCALE

400 200 0 400 800

1 in. = 400 ft.

ATLAS EXPLORATIONS LTD
ROSS RIVER, YUKON
FYRE LAKE AREA
ASH MINERAL CLAIMS
GEOLOGICAL MAP

GEOLOGIST : T.L. SADLIER-BROWN
PARTY CHIEF : P. NEILSON
DATE : JUNE 1966
CLAIM POSTS : Ash 1/3 2/4
DRAWN BY : J.N.B.