

GEOLOGICAL REPORT

on the GARY claims,
located about 15 miles SSW of Macmillan Pass
on the North Canal Road.
Claim sheet 105-0-1, 63°04'N 130°13'W.
by
Clyde L. Smith, Ph.D., P.Eng.
June 8, 9, 10, 11 & 30, 1975.

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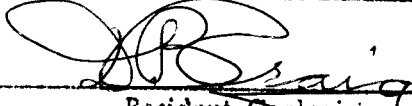
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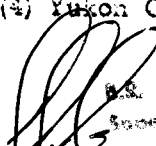
This report has been examined by the Geological Evaluation Unit and is recommended to the Commissioner to be considered as representation work in the amount of


\$2100.00



Resident Geologist or
~~Resident Mining Engineer~~

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


B.S. BAXTER
Supervising Mining Recorder


Commissioner of Yukon Territory



I. INTRODUCTION

In June of 1975 Ogilvie Joint Venture carried out geological, geochemical and geophysical (gravity) work on the GARY claims, located about 15 miles SSW of Macmillan Pass, on the North Canal Road (Fig 1). This report deals with the results of the geological work, separate reports being submitted on the geochemical and geophysical surveys.

The GARY claims were staked in 1974 to cover the extension of bedded barite that outcrops on the MOOSE claims and that has similarities to the barite at the TOM Pb-Zn-Ag deposit some 7 miles to the NNE. Interest in the GARY property, which has little outcrop, was enhanced when some soil samples (1974 survey) were found to have anomalous zinc contents (to 1600 ppm). The 1975 work was intended to more accurately define the anomalous zones by geochemical sampling and a gravity survey on a cut grid.

II. LIST OF CLAIMS

<u>Claim Name</u>	<u>Holder</u>	<u>Recording Date</u>
GARY 1-3	C. McDaniel	Aug. 21-23, 1974
" 5-8	C. McDaniel	"
" 9-11	R. Wigen	"
" 13-15	R. Wigen	"
" 17-24	T. Pham	"

III. GENERAL GEOLOGY

Regional geology of the Macmillan Pass area is shown on the Niddery Lake sheet (open file map 205) of the Geological Survey of Canada. The stratigraphic sequence in the general vicinity of the GARY claims is as listed below:

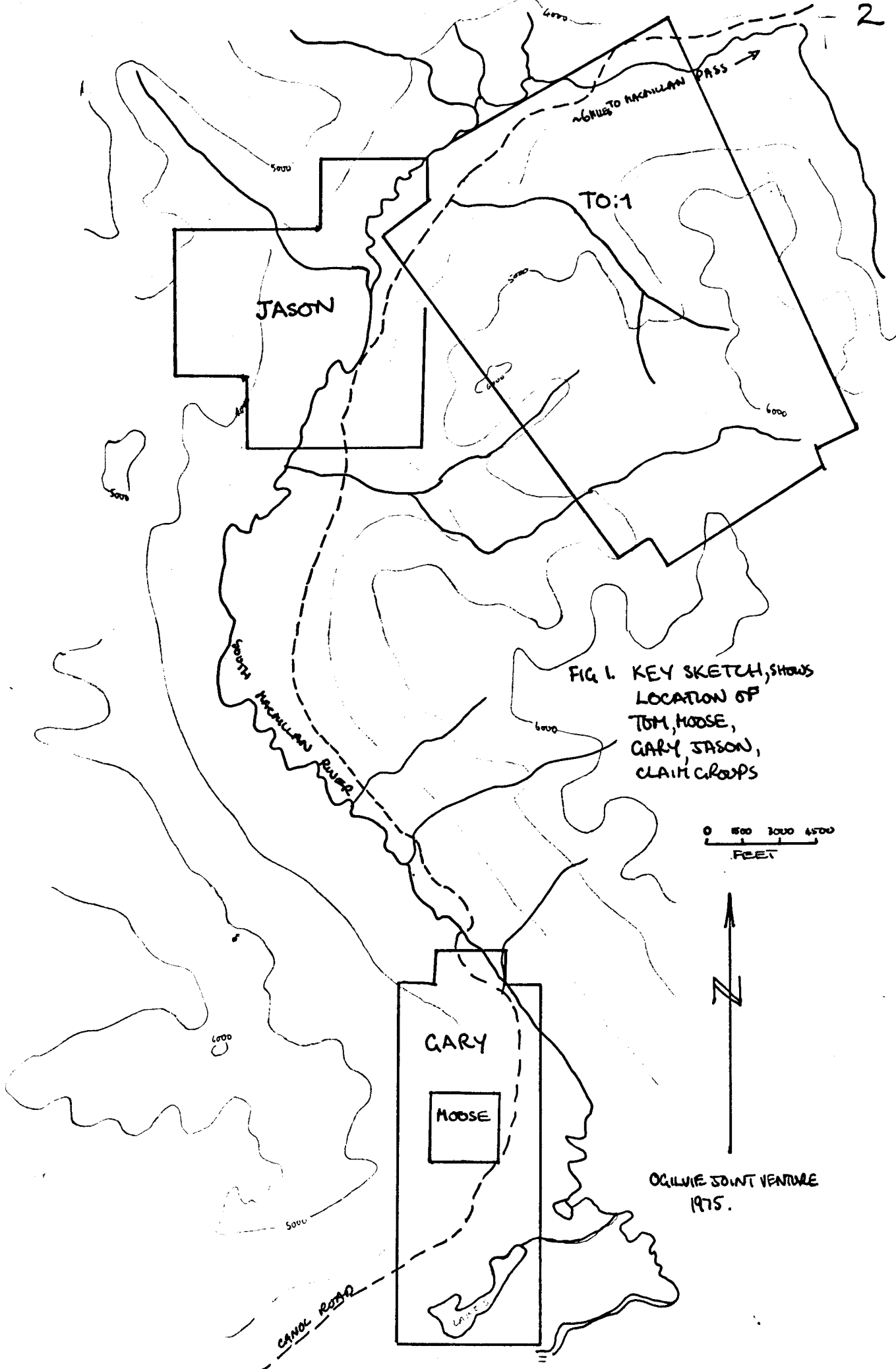


FIG. 1. KEY SKETCH, SHOWS
 LOCATION OF
 TOM, MOOSE,
 GARY, JASON,
 CLAIM GROUPS

0 1500 3000 4500
 FEET



OGILVIE JOINT VENTURE
 1975.

Devonian and Mississippian (?)

- "Unit 4": Brown-weathering siltstone, often cross-bedded.
 "Unit 3": Black carbonaceous shale, laminated, massive, siliceous or argillaceous in places. Barite in lower part both bedded and as spots. Host to mineralisation at TOM deposit.
 "Unit 2": Resistant, craggy-outcropping conglomerate. Cherty, quartzitic and argillaceous clasts to 6". Some interbedded sandstone.
 "Unit 1": Rust brown-weathering argillite characteristically with $\frac{1}{4}$ to 1 inch alternating light and dark grey bands.

Ordovician - Silurian

Road River Formation: Silver-weathering black graptolitic shales. Grey limestone, tan siliceous dolomite.

Stocks of Cretaceous granitic rock intrude and hornfels these sediments and modify structures.

Bedded barite is exposed both as natural outcrops and by trenching on the MOOSE claims, reaching approximately 100' maximum thickness, and presumably continues southward onto the GARY claims. No lead or zinc mineralisation has yet been found in this barite (although fine pyrite is present) but in other respects, such as the finely laminated appearance, the barite resembles bedded barite that contains galena and sphalerite at the TOM deposit near Macmillan Pass. Initially it was thought that the barite horizon at the MOOSE and GARY claims was the same as at the TOM property, but mapping several miles to the north suggests that the barite on the MOOSE and GARY claims is within "unit 1", apparently near the contact with the underlying Road River Formation.

The barite bed on the MOOSE and GARY claims is strongly folded both on a megascopic scale and on the scale shown by the cross-section (Fig 2). The minor folds characteristically have steep and often overturned east limbs and flatter-dipping west limbs, their style resembling

that of the larger folds. Argillaceous interbeds occur within parts of the barite zone, particularly the top, and are siliceous, often pyritic, and dark brown weathering.

IV. CONCLUSIONS AND RECOMMENDATIONS

Geological mapping shows that the barite exposed on the MOOSE claims should continue beneath overburden onto the GARY claims. Geochemical and gravity surveys were conducted across the projected extension of the folded barite sheet, and are described in separate assessment reports. These results show anomalous zinc values and several strong gravity anomalies and exploratory drilling should be considered to test the barite horizon for lead-zinc mineralisation.

V. PERSONNEL EMPLOYED

Clyde L. Smith, geologist; 5354 6th Ave., Delta, B.C.
P. C. LeCouteur, geologist; 989 Canyon Blvd., N.Vancouver, B.C.

VI. QUALIFICATIONS OF C. L. SMITH, AUTHOR

Education: Carleton College, Northfield, Minn., U.S. - B.A. rec'd 1959
University of B.C., Vancouver, B.C. - M.Sc. rec'd 1962
University of Idaho, Moscow, Ida., U.S. - Ph.D. rec'd 1966

Employment: 1970-present: Consulting Geologist, Vancouver, B.C.
1968-1970: Director and Exploration Mgr., Spartan Explorations
1966-1968: Chief Geologist, Atlas Explorations Ltd.
1965-1966: Senior Geologist, Kerr-Addison Mines Ltd.

Professional: Registered Professional Engineer, Association of Professional Engineers, Province of British Columbia

VII. EXPENDITURES: June 8, 9, 10, 11 & 30, 1975

Helicopter: 8 hrs @ \$140/hr	\$1120.00
Fuel: 128 gal @ \$1.20/gal	150.00
Salaries	900.00
Subsistence: 2 men, 5 days @ \$15/man/day	150.00
Equipment and Expediting	100.00
Assays	<u>70.00</u>
TOTAL	\$2490.00