GEOLOGICAL REPORT

on the JASON claims,
located about 10 miles SW of Macmillan Pass.
Claim sheet 105-O-1, 63°09'N 130°15'W.
by
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June 19 and July 27, 28 & 29, 1975

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I. INTRODUCTION

During June and July, 1975, Ogilvie Join: Venture made a geological examination of the JASON claims (Fig 1) and carried out geochemical and gravity surveys on a grid. This report deals with the geological work, separate reports being submitted on the geochemical and gravity surveys.

The JASON claims were staked in 1974 by Ogilvie Joint Venture and are of interest because the geology is similar to that at the nearby TOM Pb-Zn-Ag deposit and because there are lead and zinc geochemical anomalies (soils) at the same stratigraphic level as the mineralisation at the TOM property.

II. LIST OF CLAIMS

Claim Name	Holder	Recording Date
JASON 1-8	J. Rolls	Aug. 21-23, 1974
" 9 & 10	D. McKenna	"
" 22 & 24	C. Matsen	"

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 JASON claims is as listed below:

Devonian and Mississippian (?)

"Unit 4": Brown-weathering siltstone, often cross-bedded.

"Unit 3": Black carbonaceous shale, laminated, massive, siliceous, or orgillaceous in places. Barite in lower part both bedded and as spots. Host to mineralisation at TOM deposit.

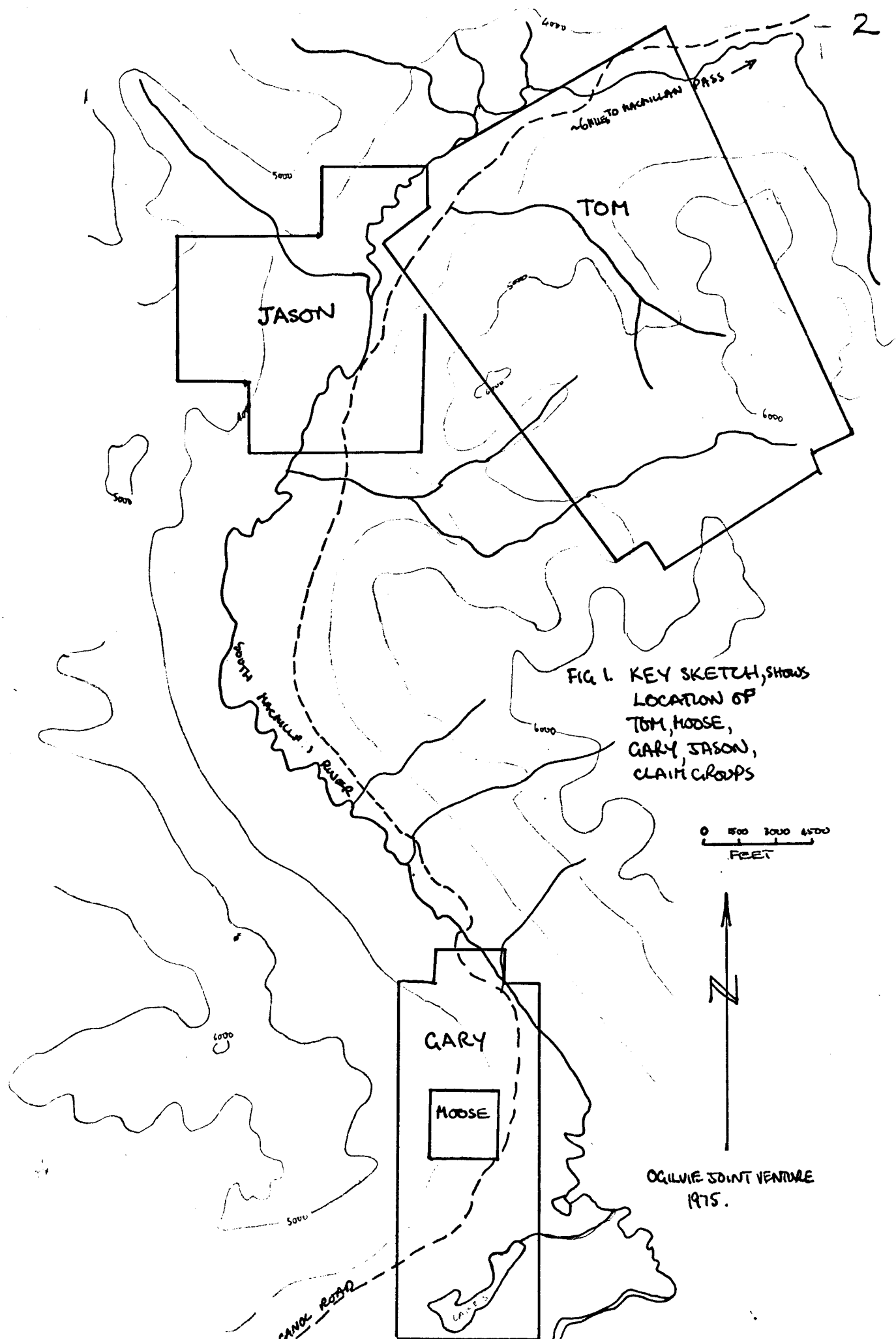

FIG 1. KEY SKETCH, SHOWS LOCATION OF TOM, MOOSE, GARY, JASON, CLAIM GROUPS

OGILVIE JOINT VENTURE
1975.

"Unit 2": Resistant, craggy-outcropping conglomerate. Cherty, quartzitic and argillaceous clasts to 6". Some interbedded sandstone.

"Unit 1": Rust brown-weathering argillite characteristically with ¼ 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.

A detailed map of the JASON property is shown as Fig 2. In the western part of the JASON claims Units 1, 2 and 3 are well exposed in the synclinal and anticlinal structures but outcrop in the eastern claims is poor. A number of subdivisions of the units have been recognised, particularly in Unit 3 (see Fig 2). Particular importance is placed on the subunit marked as "spot Ba" since this is at the same stratigraphic level as the bedded barite at the TOM deposit. The "spot Ba" shale interval contains up to about 20% by volume of small ovoids 1-2 mm across that in thin section are seen to consist of euhedral barite and anhedral quartz. Also of interest is the intraformational conglomerate subunit which is rare elsewhere in unit 3. It is thought that the fault marked to the west of the claim group may have been active at the time of sedimentation and that the intraformational conglomerate may be a result of this activity.

Like the TOM, the JASON property is situated at a place where the host unit thickens rapidly, for immediately to the east of the JASON claim group Unit 3 reaches its maximum thickness of in excess of 4000', largely of the carbonaceous and siliceous subunit. Such places of rapid

thickness changes appear to be favourable sites for the accumulation of stratiform sulphide deposits (Meggen, Rammelsberg, for example). The rapid change in thickness of Unit 3 may be related to the syn-sedimentary fault noted above.

No visible mineralisation has yet been found in outcrops on the JASON claims.

IV. CONCLUSIONS AND RECOMMENDATIONS

The occurrence of baritic spots on the western claims, the Zn and Ba anomalies and weak gravity anomaly in the area of the grid all suggest the possibility of lead-zinc mineralisation at the same stratigraphic level as the nearby TOM deposit. Several thousand feet of exploratory drilling should be considered in the area of the grid to test this possibility.

V. PERSONNEL EMPLOYED

C. L. Smith, geologist; 5354 6th Ave., Delta, 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

Helicopter: 7 hrs @ $140/hr	$ 980.00
Fuel: 112 gal @ $1.20/gal	130.00
Salaries	600.00
Subsistence	60.00
Equipment and Expediting	50.00
Maps	50.00
	$ 1870.00

Red & capris —
reduce to 1/2 scale

FIG. 2.

OGILVIE JOINT VENTURE 1975

JASON CLAIMS : GEOLOGICAL MAP

LEGEND

DEV-MISS?

- 3cs — CARBONACEOUS AND SILICEOUS SHALE — WITH INTERBEDS OF INTRAFORMATIONAL CONGLOMERATE, SHALE WITH BARITE NODULES ("SPOTS")
- 3wb — "WIDE-BEDDED" SHALE
- 2u — INTERBEDDED CONGLOMERATE, SANDSTONE, SHALE
- 2 — CONGLOMERATE

ORD-SIL

- IASS-UMD U — INTERBEDDED MASSIVE SHALE, SANDSTONE
- ILAH — LAMINATED SHALE
- RRsh — ROAD RIVER SHALE
- RRls — ROAD RIVER LIMESTONE

N

SCALE 1" = 1000'

MAPPED BY: C.L. SMITH
BASE MAP: AIRPHOTO ENLARGED TO 1" = 1000'