GEOCHEMICAL REPORT

on the GARY claims,
located about 15 miles SSW of Macmillan Pass
on the North Canol Road.
Claim sheet 105-O-1, 63°04'N 130°13'W.

by
Clyde L. Smith, Ph.D., P.Eng.
June 9-15, 17-20, 23-30 and July 31, Aug. 1, 1975

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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

$ 400.00

D.B. Craig

Resident Geologist ~~or Resident Mining Engineer~~

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

E.R. BAXTER
~~Supervising~~ Mining Recorder

for Commissioner of Yukon Territory

The Supervising Mining Recorder
SEP 2 0 1975
WHITEHORSE
Yukon Territory

I. INTRODUCTION AND GENERAL GEOLOGY

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 Canol Road (Fig 1). This report deals with the results of the geochemical work, separate reports being submitted on the geological 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.

Outcrop is poor on the GARY claims but the bedded barite (to 100' thick) exposed on the adjoining MOOSE claims is thought to extend onto the GARY claims, under overburden that reaches a thickness of at least 30' in places. The barite, associated siliceous argillites, underlying black shale and overlying argillite and siltstone are thought to be of Ordovician-Silurian age, older than the Devonian shales that host the TOM deposit (see separate geological report). No lead or zinc has been detected by prospecting on the available outcrops on the GARY claims.

II. LIST OF CLAIMS

Claim Name	Holder	Recording Date
~~GARY 4~~	~~C. McDaniel~~	Aug. 21-23, 1974
GARY 16	R. Wigen	"
" 25-~~27~~	J. Thorkelson	"
~~" 33-38~~	~~D. Zuter~~	"

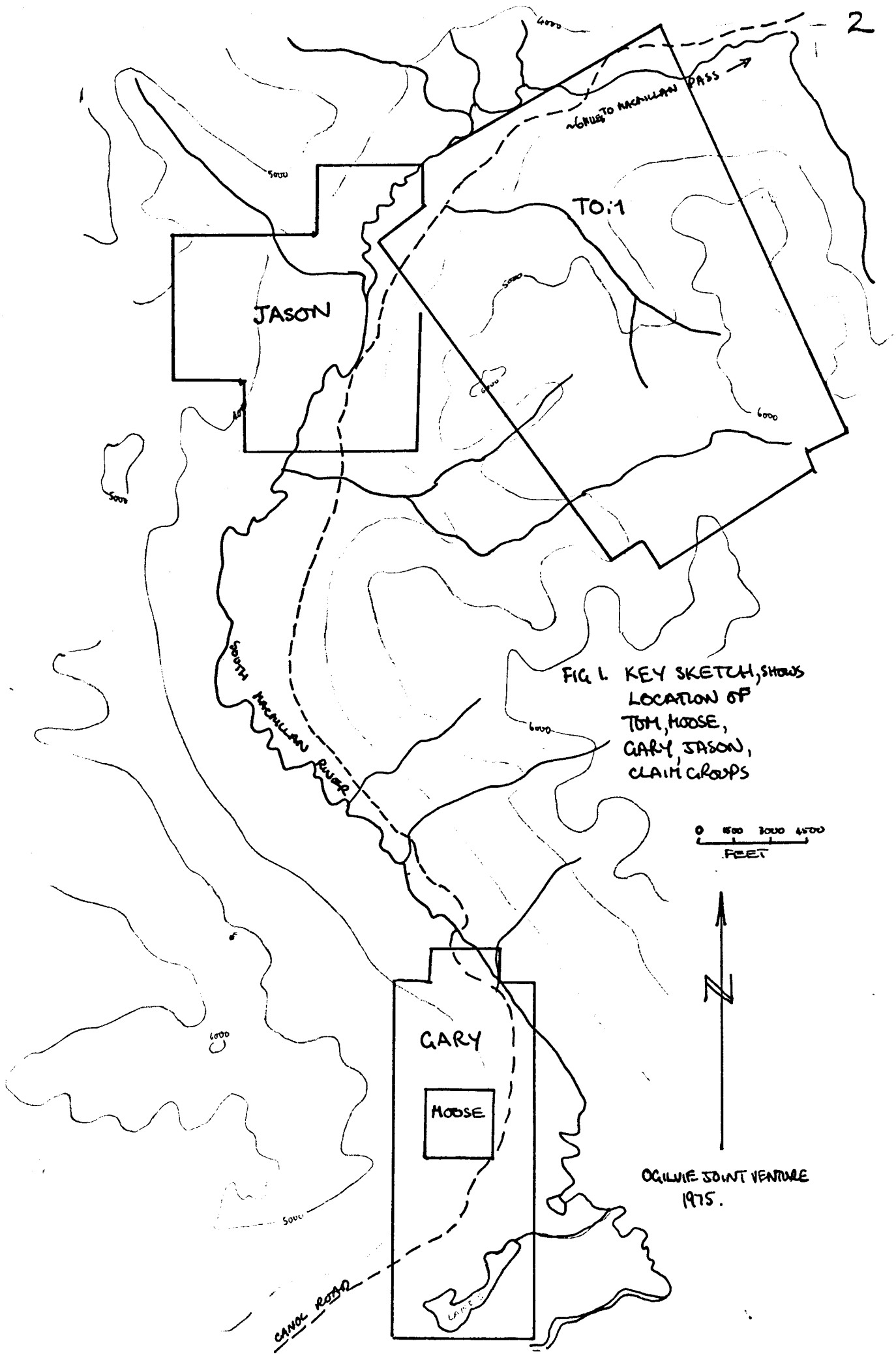


FIG 1. KEY SKETCH, SHOWS LOCATION OF TOM, MOOSE, GARY, JASON, CLAIM GROUPS

OGILVIE JOINT VENTURE
1975.

III. TECHNIQUES EMPLOYED IN GEOCHEMICAL WORK

Samples were collected on a grid with north-south lines spaced 500' apart and a sample interval of 100'. Alternate lines were cut and stations on these lines coincide with gravity stations. The B horizon was sampled using an iron mattock and soil was placed in Kraft paper bags.

Sample drying and analysis were carried out by Barringer Research of Whitehorse. After being dried and screened 250 mg of -80 mesh material was digested for 4 hours in perchloric acid, the volume diluted to a standard volume and this solution analysed on an atomic absorption spectrometer for Pb and Zn. For barium a 250 mg sample was digested for 1 hour in EDTA, the volume adjusted and the solution analysed by atomic absorption spectrometer.

IV. RESULTS AND INTERPRETATION

Figure 2 shows analyses of Pb-Zn-Ba plotted on the grid and Fig 3 is an interpretation of this data, outlining zones of anomalous Zn and Ba. All the data are shown in histogram form in Figs 4, 5 and 6 with those values considered to be anomalous lying to the right of the dashed lines.

Anomalous zones of both Zn and Ba tend to be rather local and irregular, possibly because the overburden incompletely masks bedrock anomalies. The discontinuous Ba and Zn anomalous zone between lines 10S and 30S is considered significant particularly because the folded barite exposed to the north projects into this region both on geological grounds and also from the gravity survey, although the strongest gravity anomalies do not extend to line 20S.

FIG 4 GARY - SOIL LINES

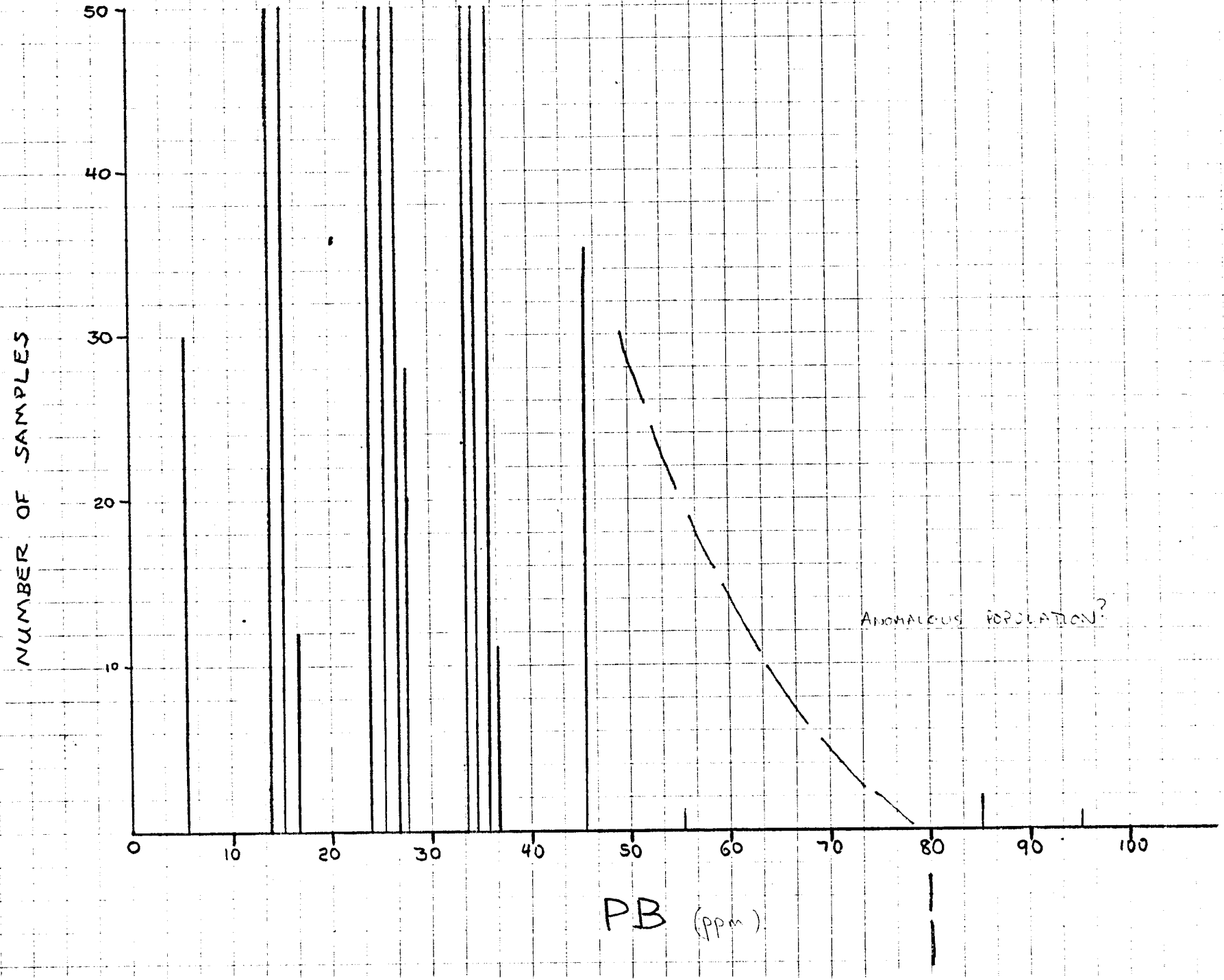
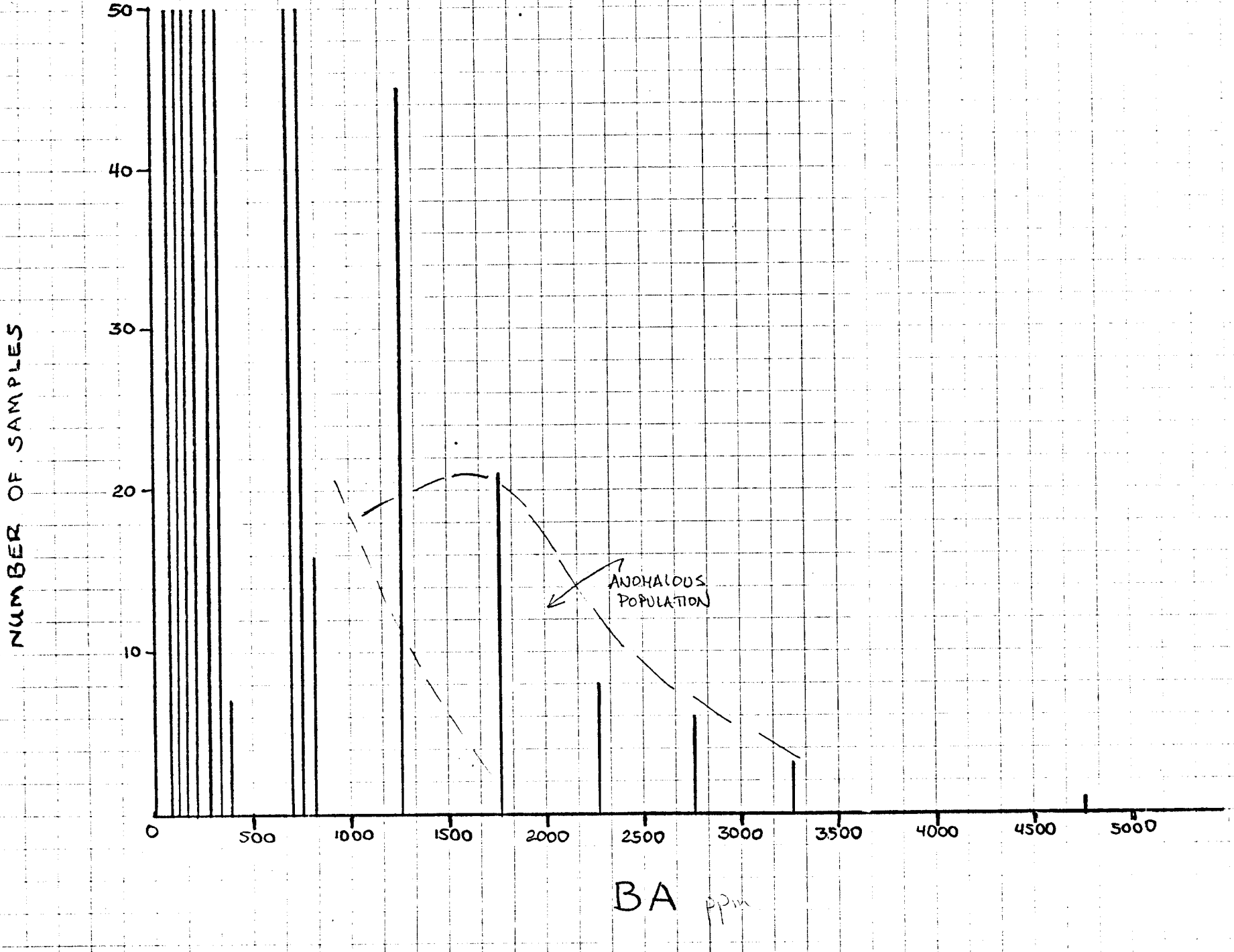


FIG 6 GARY - SOIL LINES



V. CONCLUSIONS AND RECOMMENDATIONS

The near coincidence of a significant Zr anomalous zone with anomalous Ba in an area where subsurface bedded barite is expected is thought to be significant. Several thousand feet of exploratory drilling should be considered to test the barite horizon for lead-zinc mineralisation.

VI. PERSONNAL EMPLOYED

T. Pham, field worker; present address unknown
P. Sidney, field worker; Teslin, Y.T.
G. Gamache, field worker; Maple Ridge, B.C.

VII. 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

VIII. EXPENDITURES: June 9-15, 17-20, 23-20 and July 31, Aug. 1, 1975

Helicopter: 8 hrs @ $140/hr	$ 1120.00
Fuel: 128 gal @ $1.20/gal	150.00
Salaries: 3 men @ $35/day X 21 days, X ½	1100.00
Subsistence: 3 men, 21 days @ $15/man/day, X ½	470.00
Equipment and Expediting	150.00
Geochemical Lab: 400 samples @ $2.85	1140.00
TOTAL	$ 4130.00

OGILVIE JOINT VENTURE 1975

FIG 2. GARY CLAIMS : GEOCHEMICAL VALUES Pb-Zn-Ba (ppm)

CLAIM OUTLINES

SCALE 1" = 500'

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27

26

25

16

4

3

2

15

14

GAR 72/1 1/23

MOOSE 2

MOOSE 1

—50W —40W —30W —20W —10W —0 —10E —20E

—30S —20S —10S —0 —10N —20N

FIG 3. GARY CLAIMS : INTERPRETATION OF GEOCHEMICAL RESULTS SHOWING Ba AND Zn ANOMALIES.

FOR CLAIM OUTLINES SEE FIG 2.

1" = 500'

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