

## GEOCHEMICAL REPORT

on the JASON claims,  
located about 10 miles SW of Macmillan Pass.  
Claim sheet 105-0-1, 63°09'N 130°15'W.

by  
Clyde L. Smith, Ph.D., P.Eng.  
June 20, 22-29 and July 6-11, 1975



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## I. INTRODUCTION AND GENERAL GEOLOGY

During June and July, 1975, Ogilvie Joint 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 geochemical results, other reports being submitted on the gravity and geological work.

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

The regional geology in the vicinity of the JASON claims is shown on the Niddery Lake sheet (open file map 204) of the Geological Survey of Canada. Three main rock units outcrop on the JASON property, as listed below:

### Devonian (?)

- Black shale (unit 3): Has barite spots at same horizon as barite at TOM.
- Conglomerate (unit 2): Cherty and argillaceous pebbles

### Ordovician, Silurian, Devonian (?)

- Argillite (unit 1): Rusty-weathering argillite with alternating light and darker grey bands.

The principal structures are a gently plunging anticline and syncline that are terminated to the west by a major fault that brings the underlying Ord-Sil Road River Formation into contact with the younger rocks listed above.

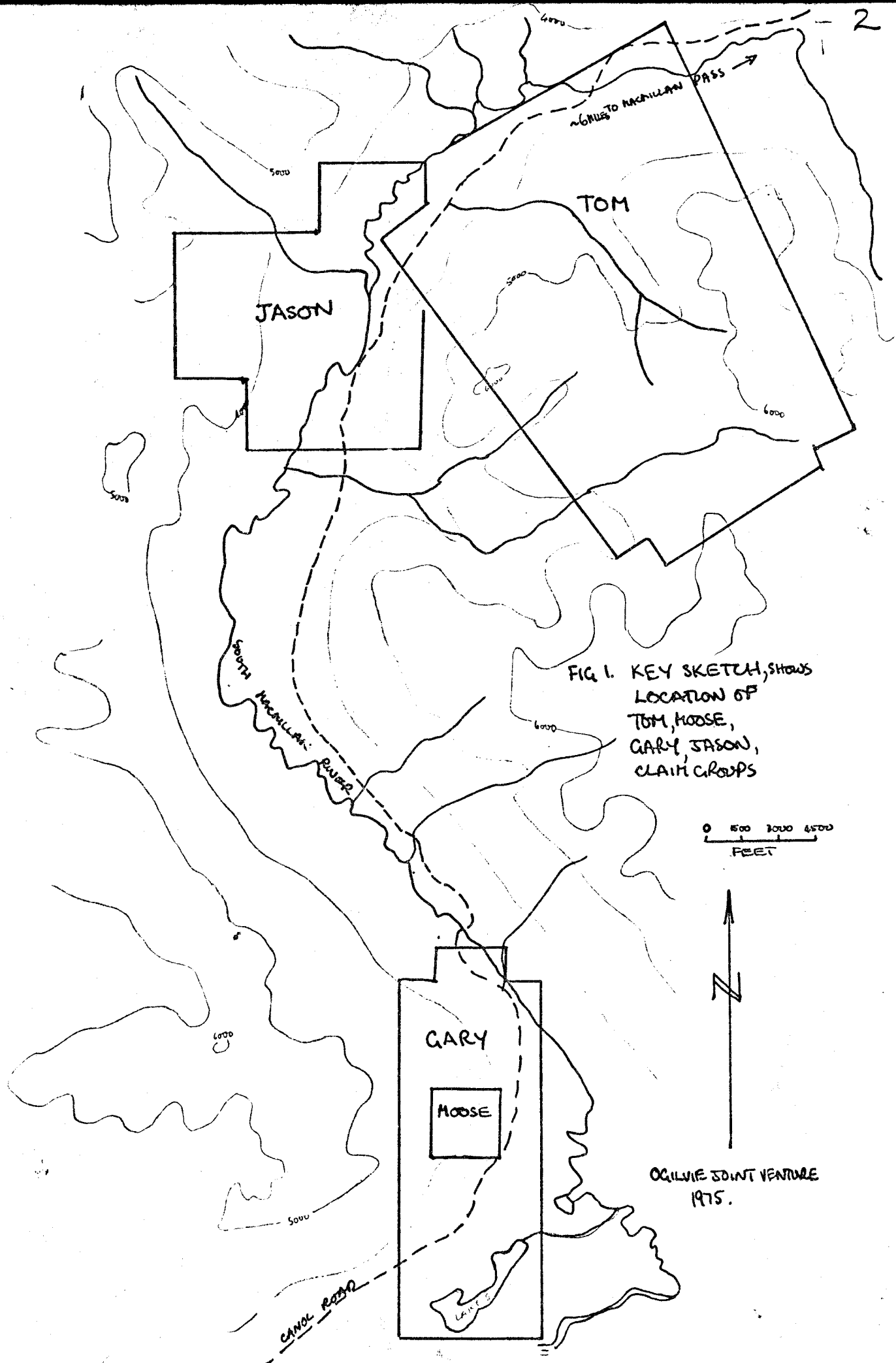


FIG. 1. KEY SKETCH, SHOWS LOCATION OF TOM, MOOSE, GARY, JASON, CLAIM GROUPS

0 500 1000 1500 2000 2500 3000 3500 4000 4500  
FEET



OGILVIE JOINT VENTURE  
1975.

A map and more detailed description of the geology are contained in a separate geological report.

## II. LIST OF CLAIMS

<u>Claim Name</u>	<u>Holder</u>	<u>Recording Date</u>
JASON 11-16	D. McKenna	Aug. 21-23, 1974
" 17-21, 23	C. Matsen	"
" 25-32	F. McKay	"
" 33, 35-40	K. Gray	"
" 41-44	P. McKenna	"

## III. TECHNIQUES EMPLOYED

Soil samples were collected from the B horizon in pits dug by iron mattock at a spacing of 100' along 3 parallel cut lines spaced 1500' apart. The cut lines, which total 17,500 feet, were also used for a gravity survey. The geochemical sample sites coincide with the gravity stations.

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 with contours for 400 and 600 ppm Zn and 150 and 1000 ppm Ba. The results are also shown in histogram form as Figs 3, 4 and 5.

FIG 3 EAST JASON- SOIL LINES

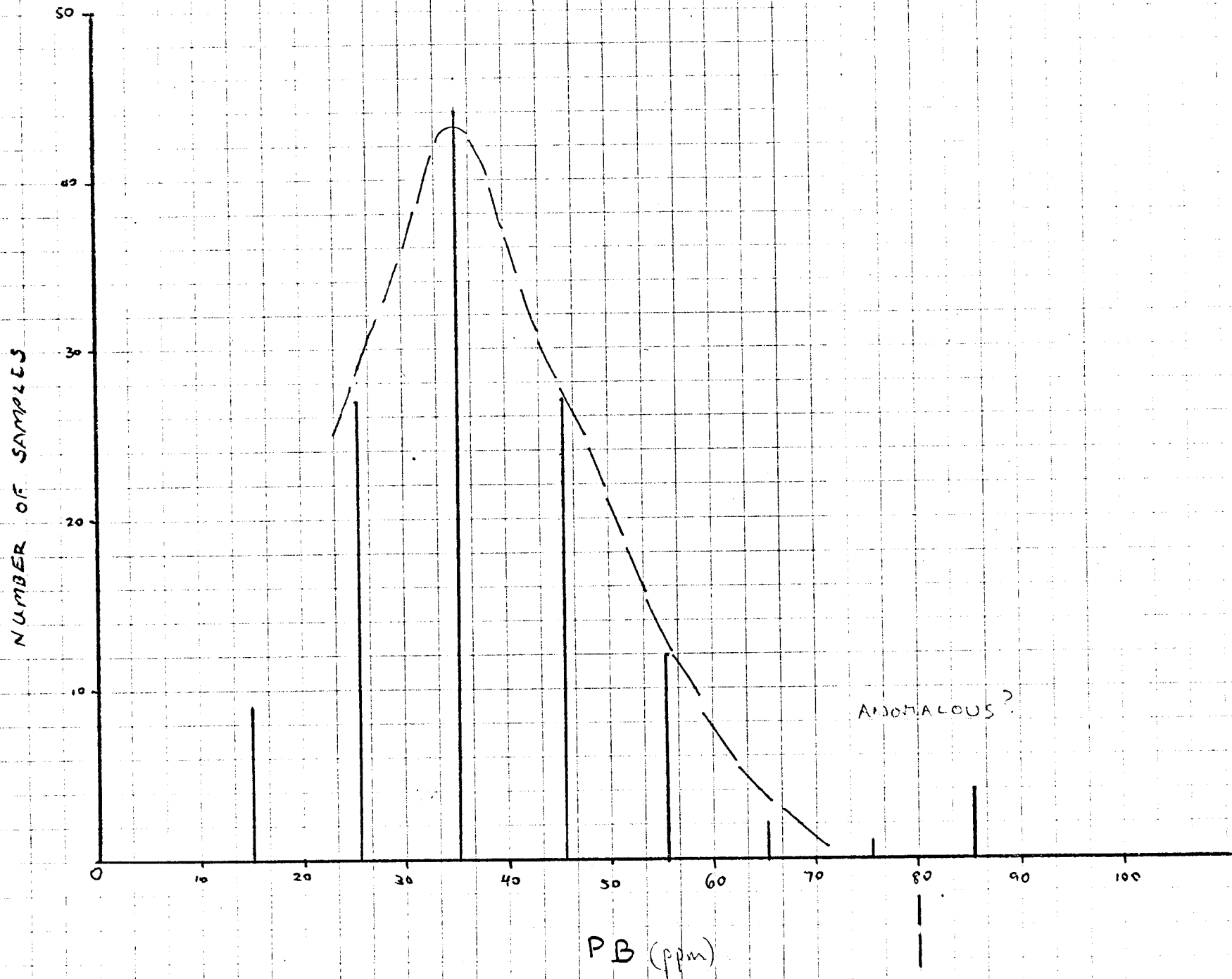
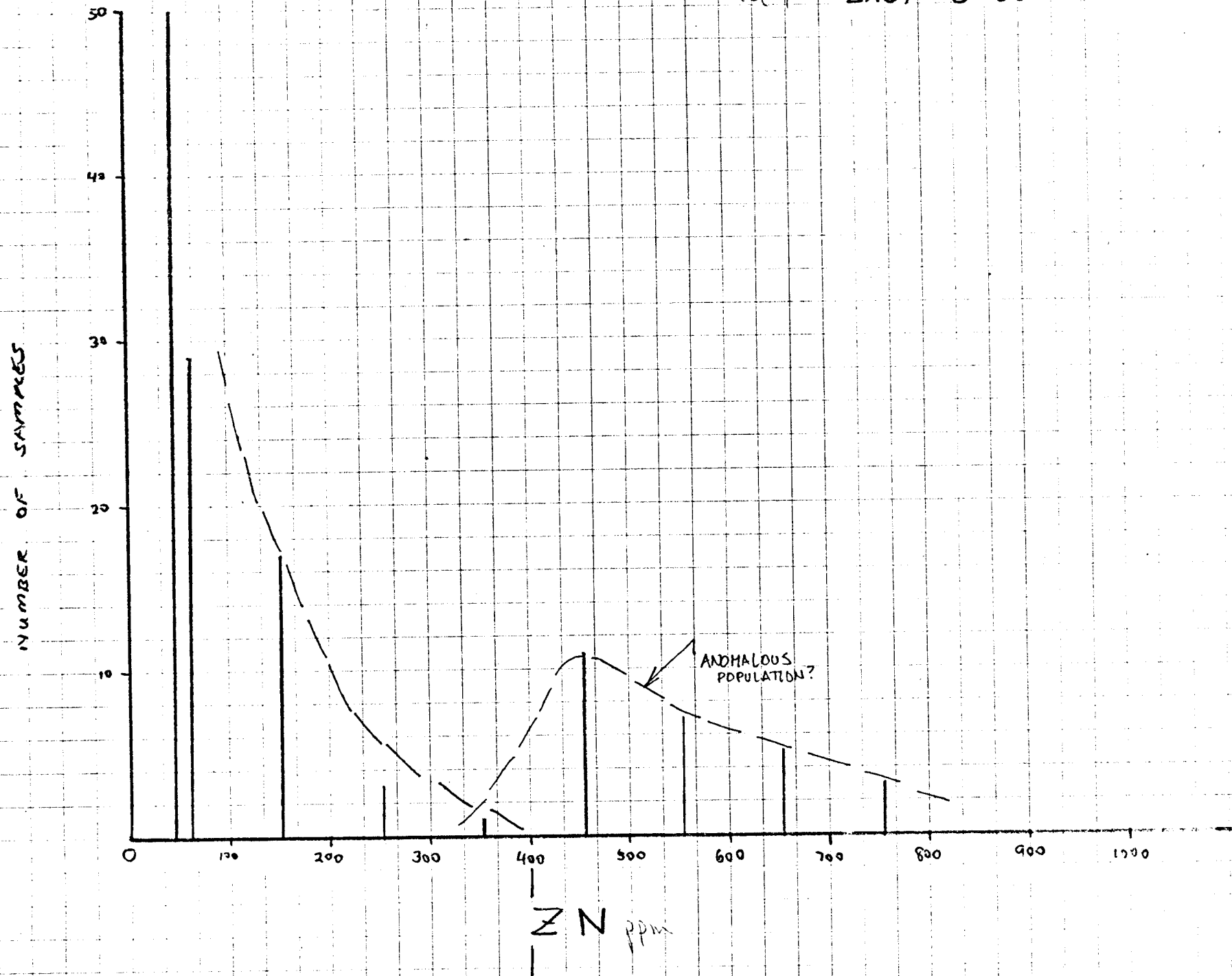
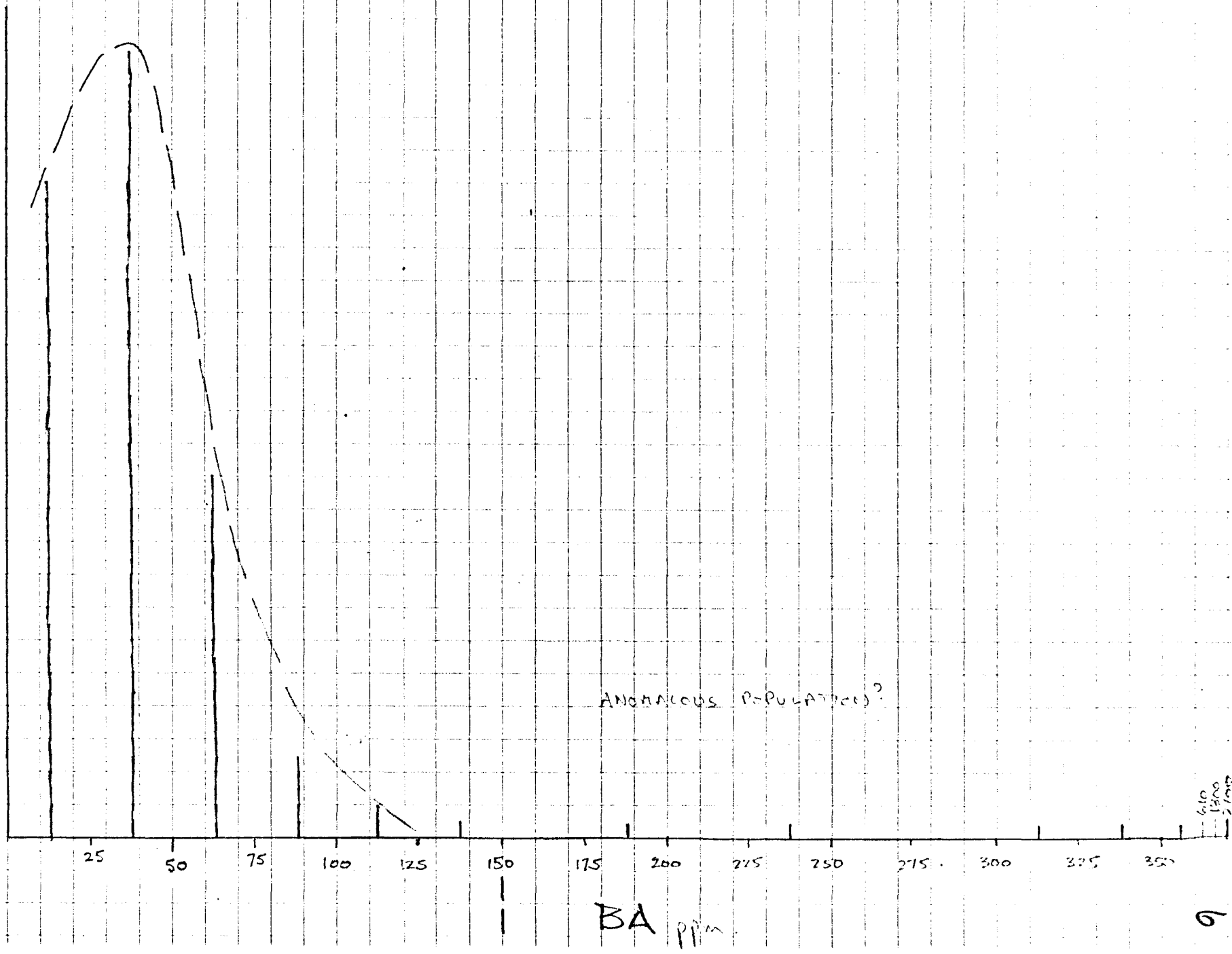


FIG 4 EAST JASON - SOIL LINES



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FIG. 5. (CONTINUED) - CARBON-13



The interpretation shown in Fig 2 is that there are subparallel Zn and Ba anomalous zones separated by about 1000'. Overburden obscures the bedrock in the area of the grid but mapping to the west shows that the anomalous zones have the same trend as the strike of the underlying shales, suggesting that the anomalous zones are associated with certain beds in these rocks.

#### V. CONCLUSIONS AND RECOMMENDATIONS

In the surveyed area the stratigraphy is similar to that at the nearby TOM property, although obscured by Quaternary overburden. Just to the west of the grid, for example, there are excellent exposures of the black shale that hosts the TOM deposit, including barite spots at the same horizon as the bedded (and mineralised) barite at TOM. The geochemical soil survey shows Zn and Ba anomalies that are consistent with the hypotheses that strata-bound Pb-Zn-Ag mineralisation may be present on the JASON property at the same level as the mineralisation at the TOM deposit. The weak gravity high interpreted from the gravity results is within the area of greatest potential.

The coincidence of the above geological, geochemical and gravity features is thought to be significant even though some of these results, when considered separately, do not offer strong encouragement. Several thousand feet of exploratory drilling should be considered in the grid area to test the same horizon that carries Pb-Zn-Ag mineralisation at the TOM property.



## VI. PERSONNEL 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

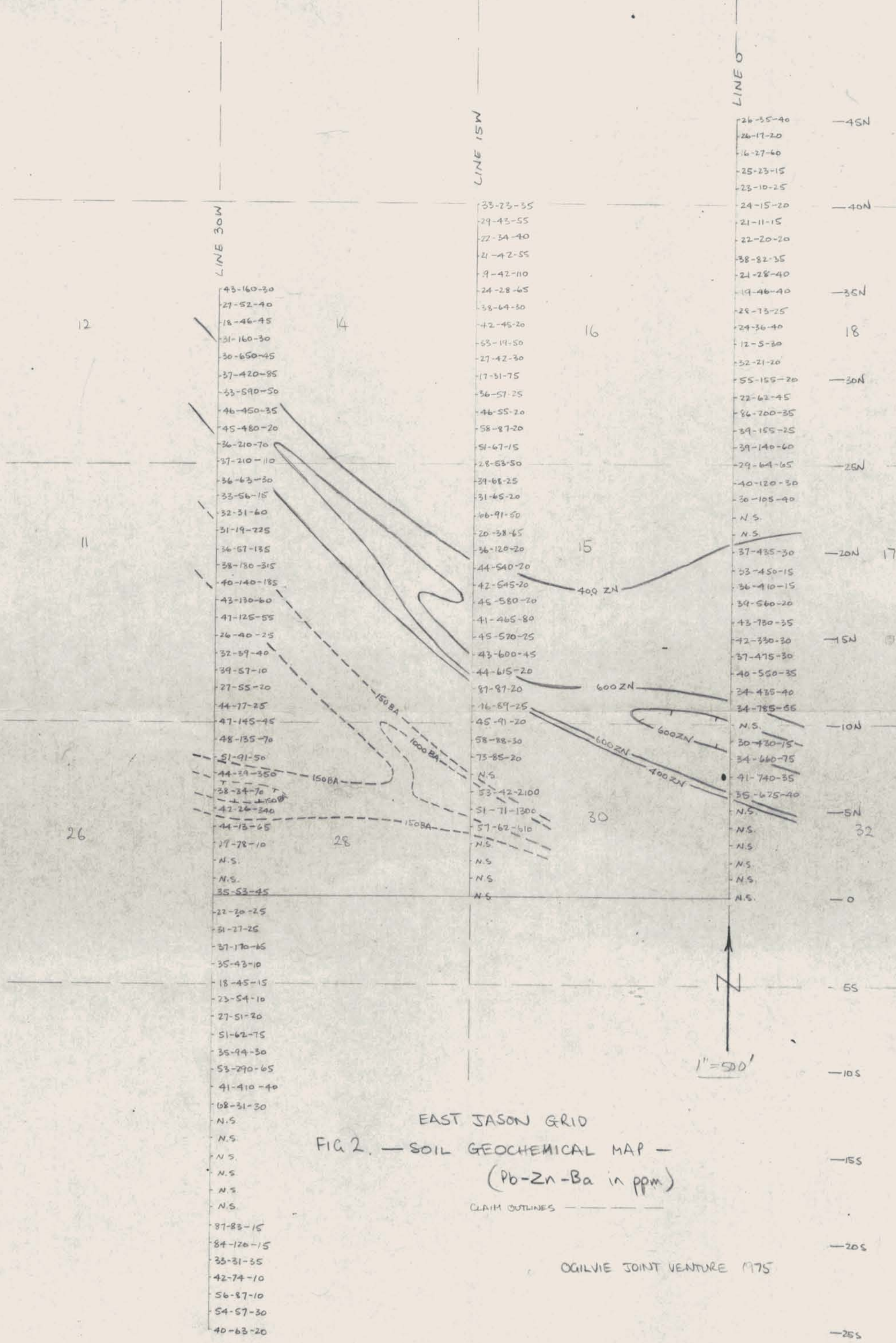
Employment: 1970-present: Consulting geologist, Vancouver, B.C.  
 1968-1970: Director and Exploration Mgr., Spartan Exploration  
 1966-1968: Chief Geologist, Atlas Explorations Ltd.  
 1965-1966: Senior Geologist, Kerr-Addison Mines Ltd.

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

## VIII. EXPENDITURES

Helicopter: 6.5 hrs @ \$140/hr	\$ 910.00
Fuel: 100 gal @ \$1.20/gal	120.00
Salaries: 3 men, 15 days @ \$35/day. X $\frac{1}{2}$	785.00
Subsistence: 3 men, 15 days @ \$15/man/day, X $\frac{1}{2}$	335.00
Equipment and Expediting	100.00
Geochemical Lab: 155 samples @ \$.2.85	<u>440.00</u>
TOTAL	\$ 2690.00

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EAST JASON GRID  
 FIG 2. — SOIL GEOCHEMICAL MAP —  
 (Pb-Zn-Ba in ppm)

CLAIM OUTLINES

OGILVIE JOINT VENTURE 1975