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GEOLOGICAL AND GEOCHEMICAL REPORT
ON THE
ALICE NICKEL-COPPER-COBALT PROSPECT

Alice Arm
Skeena Mining Division
British Columbia

NTS: 103P/5E
55°35.5'N 129°41.5'W

OWNER: ANGEL JADE MINES LTD.

AUTHOR: N.C. CARTER, Ph.D. P.Eng.

DATE: DECEMBER 31, 1997

MINING BRANCH
REPORT

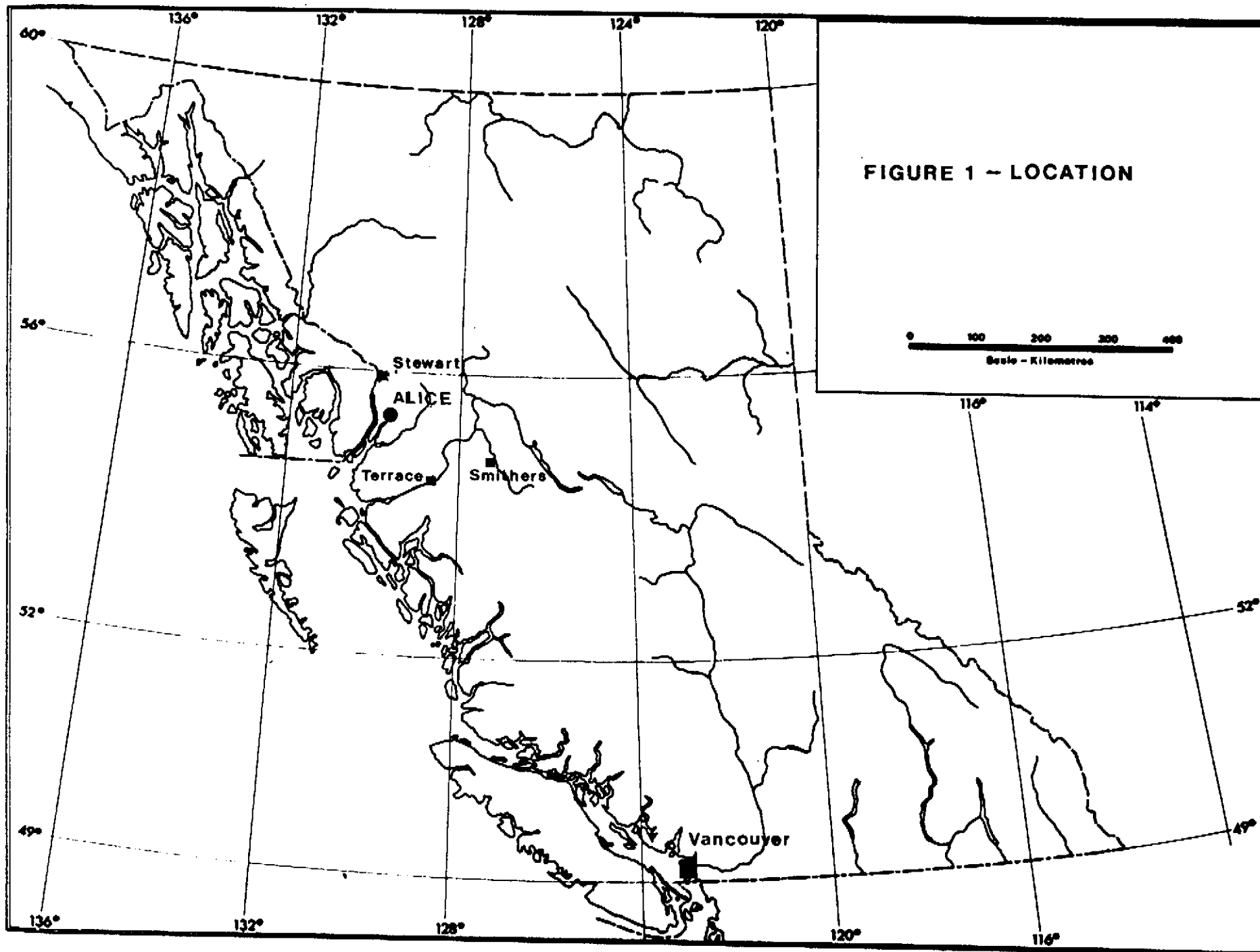
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INTRODUCTION

Location and Access

The ALICE property is situated on tidewater near the entrance to Alice Arm 60 km south-southeast of Stewart in northwestern British Columbia (Figure 1). Mineral claims comprising the property are about midway between the community of Kitsault and the site of Anyox (Figure 2). The geographic centre of the property is at latitude 55°35.5' North and longitude 129°41.5' West in NTS map-area 103P/5E (Figure 2).

Access is by helicopter from Stewart or by boat from the end of road at Kitsault on Alice Arm, some 12 km east of the property.

Mineral Property

The ALICE property consists of four 2-post mineral claims owned by Angel Jade Mines Ltd. (Figure 3). Details of the mineral claims are as follows:

<u>Claim Name</u>	<u>Units</u>	<u>Record Number</u>	<u>Date of Record</u>
ALICE 1	1	340267	September 25, 1995
ALICE 2	1	340268	" "
ALICE 3	1	340269	" "
ALICE 4	1	340270	" "

History

Initial exploratory work within the present property area was carried out prior to 1916 and consisted of hand trenching of a sulphide zone (Hanson, 1935). No further work

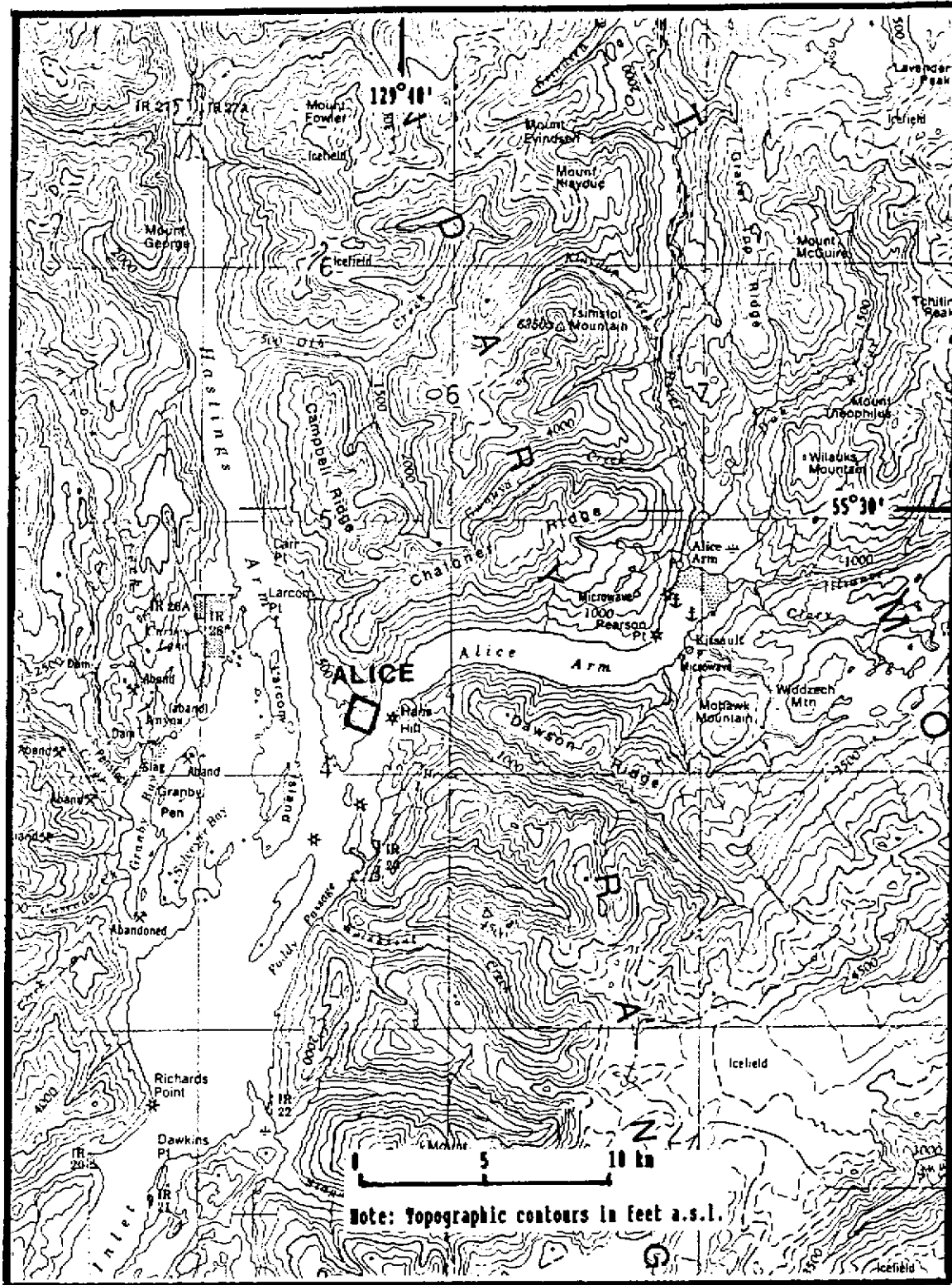


FIGURE 2 - LOCATION - ALICE PROPERTY

was reported until 1965 when the Haywire mineral claims were staked by local prospectors. Some hand trenching that year was followed by geochemical and geophysical surveys conducted by Falconbridge Nickel Mines Ltd. (Carter,1966). Two short Winkie diamond drill holes were completed by the Joanne B.C. Syndicate in 1971 (Carter,1972).

No further work was done until 1980 when the property was relocated as the Sea Otter mineral claim and limited soil and rock geochemistry and an orientation magnetometer survey were completed (Burton,1980). A 1984 exploratory program, undertaken on behalf of Suez Petroleum Corporation (Dewonck,1984), consisted of the establishment of 13 km of cut grid, the collection and analyses of soil and rock samples and magnetometer and VLF-EM geophysical surveys.

Present Status

The four ALICE mineral claims were recorded on behalf of Angel Jade Mines Ltd. on September 25,1995.

A brief inspection of the property was undertaken by the writer September 21,1997 in order to determine the condition of the 1984 grid and to re-establish the position of the principal mineral showing. Two rock samples were collected for subsequent analyses.

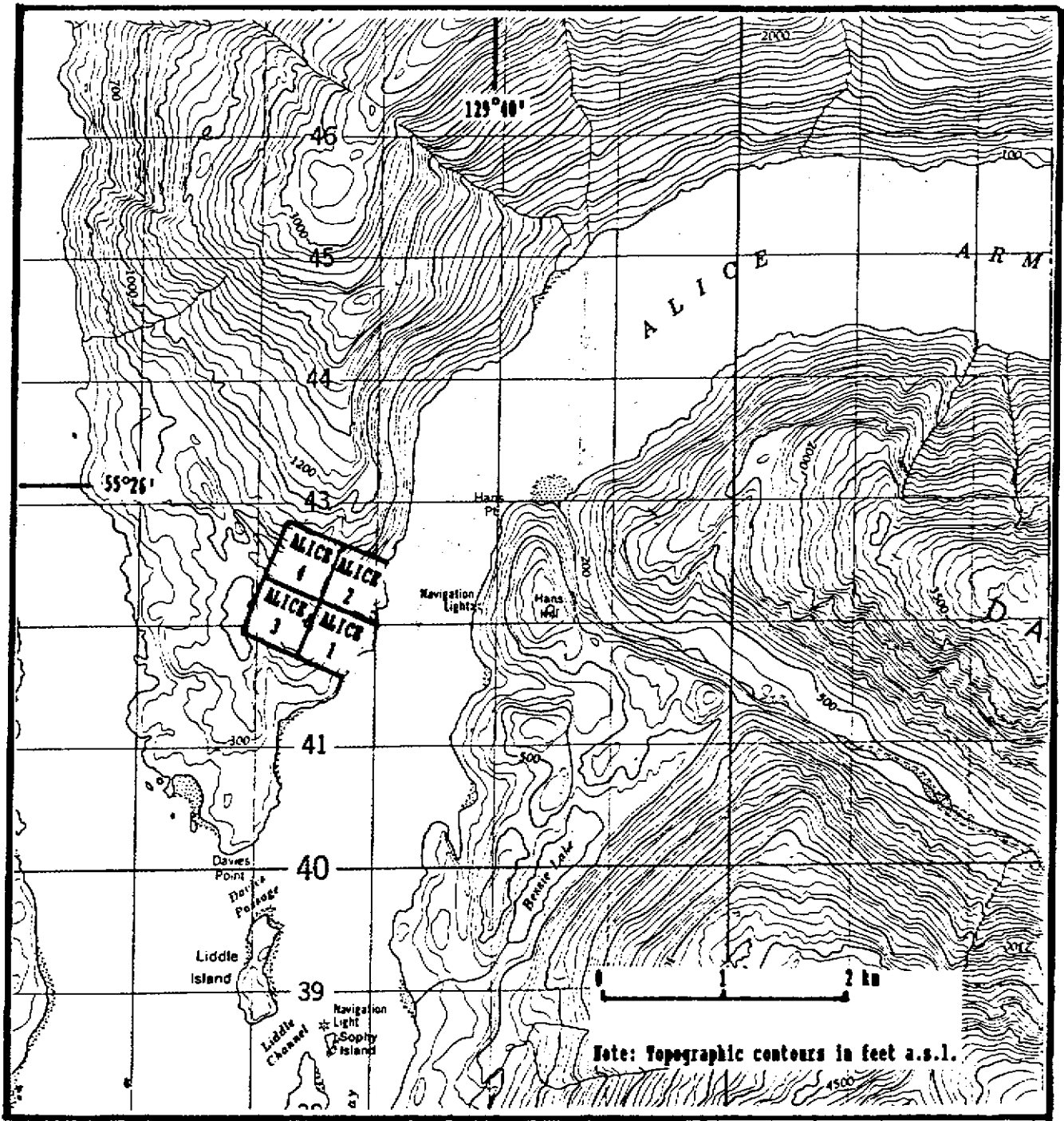


FIGURE 3 - ALICE PROPERTY - MINERAL CLAIMS

GEOLOGY AND MINERALIZATION

Physical Setting

The ALICE mineral claims cover an area of relatively low to moderate relief extending westerly from tidewater on Alice Arm to a maximum elevation of 215 metres (700 ft.) above sea level in the northwestern property area (Figures 3 and 5). Extensive forest cover consists mainly of mature hemlock and spruce and locally thick alder and buckbrush.

Bedrock is best exposed along the shore of Alice Arm and in major drainages. Elsewhere, it is obscured by variable thicknesses of poorly developed soils.

An old trail, now mainly overgrown and along the telegraph line which once connected Alice Arm and Anyox with Stewart, parallels the major drainage.

Regional Geological Setting

The ALICE property is situated near the eastern limits of the Anyox pendant, a 400 square km area of Paleozoic to Mesozoic volcanic, sedimentary and plutonic rocks within granitic rocks of the Coast Plutonic Complex or Coast Belt (Evenchick and Holm, 1997 - Figure 4).

As noted on Figure 4, the eastern half of the Anyox pendant is underlain by Middle Jurassic, Bowser Assemblage clastic sedimentary rocks, principally siltstones and mudstones, which are metamorphosed to hornfels and schist

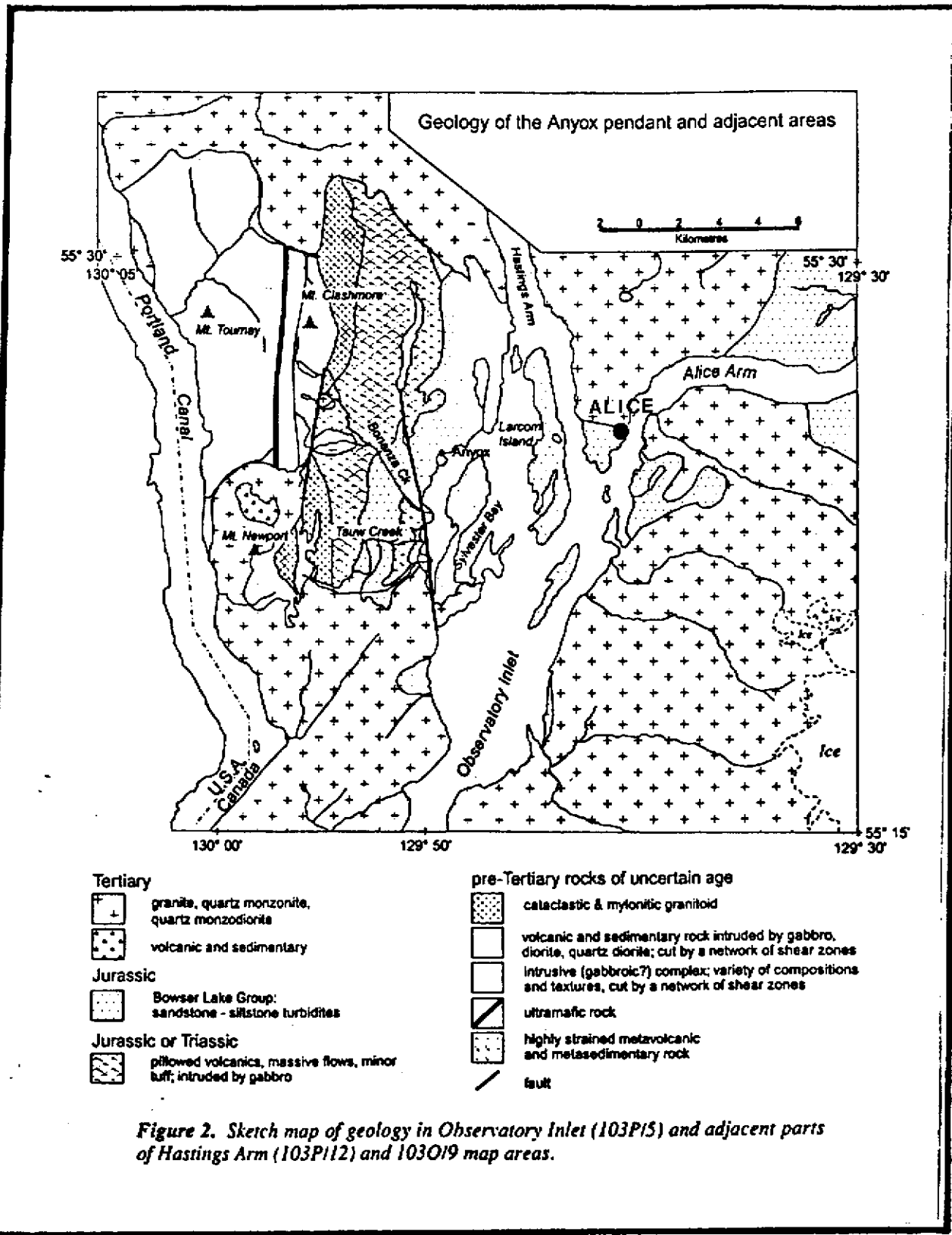


FIGURE 4 - (Evenchick and Holm, 1997)

proximal to contacts with Coast granitic rocks. The sedimentary sequence is cut by numerous, narrow gabbroic, granitic, lamprophyre and felsic dykes.

The ALICE property is situated between the well-known Anyox and Alice Arm mineral districts. Major past producing mines of the region include the Hidden Creek and Bonanza massive sulphide deposits near Anyox (25.1 million tonnes with average recovered grades of 1.4% copper, 9.1 g/t silver and 0.17 g/t gold), the Dolly Varden and Torbrit silver deposits in the upper Kitsault River area north of Alice Arm (1.3 million tonnes averaging 364 g/t silver) and the Kitsault porphyry molybdenum deposit south of Alice Arm (13.5 million tonnes grading 0.114% molybdenum).

Property Geology and Mineralization

The ALICE property covers the contact between Coast granitic rocks to the north and Bowser Assemblage siltstones to the south (Figure 5). The siltstones, which are variably hornfelsed, strike west-northwest and dip steeply north. They are intruded by both the main mass of Coast granitic rocks in northern property area and by similar rocks forming an elongate, northwest-trending body near the southern property boundary (Figure 5).

The sedimentary sequence is also cut by numerous, narrow, northwest and northeast-striking dykes and sills of

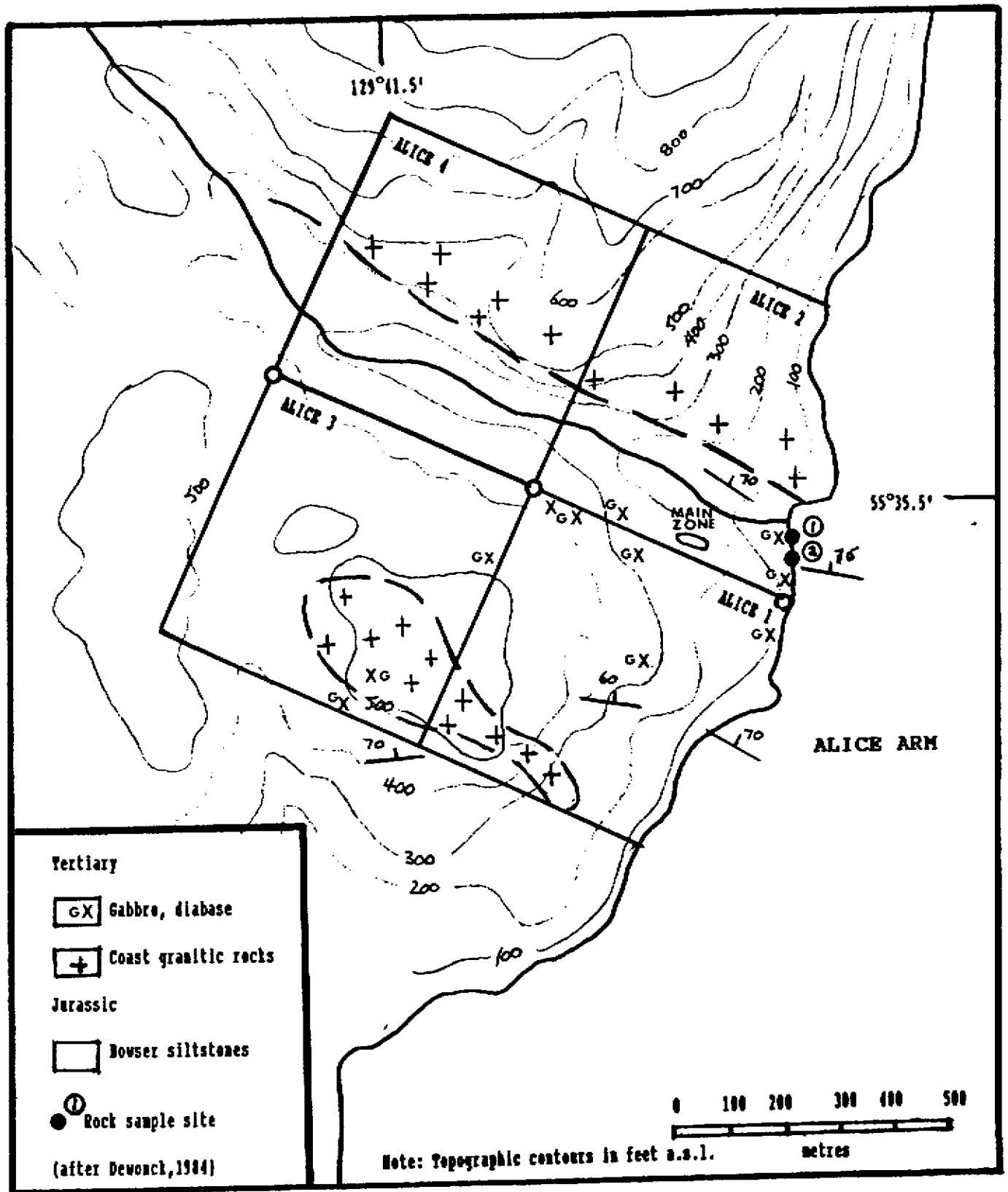


FIGURE 5 - ALICE PROPERTY - GEOLOGICAL SETTING

varying compositions including fine-grained felsic varieties, basalts, lamprophyres and gabbros and diabases.

The principal known mineral occurrence (Main Zone - Figure 5) is associated with an olivine gabbro (up to 65% olivine) sill-like body of unknown dimensions. As exposed in an open-cut in the 1960's (Carter, 1966, 1970), this medium-grained rock contained 4 mm disseminations of pyrrhotite rimmed by chalcopyrite and was capped by between 1.5 and 2 metres of leached gossanous material with some malachite containing irregular lenses of solid gabbro. A 0.3 metre thick, west-northwest-striking and north-dipping, lens of massive pyrrhotite with blebs and stringers of chalcopyrite and possibly pentlandite is developed at the interface between the gossan and underlying olivine gabbro. A prominent, 1 metre wide, northeast-striking shear zone was exposed at the eastern end of the 10 metres long hand trench. Several samples collected in 1965 and 1969 (Carter, 1966, 1970) returned the following results:

<u>Sample</u>	<u>Width(m)</u>	<u>Cu(%)</u>	<u>Ni(%)</u>	<u>Co(%)</u>	<u>Au(g/t)</u>	<u>Ag(g/t)</u>	<u>Pt(g/t)</u>
Massive lens	0.3	1.66	1.11	0.18	tr.	10.3	tr.
Gossan	1.8	0.33	0.22	0.01	tr.	tr.	-
Gabbro	grab	0.05	0.09	0.02	tr.	3.4	-
Shear zone	1.0	0.29	0.42	0.04	tr.	6.8	-
Gossan	10.0*	0.13	0.27	0.01	tr.	10.3	-

* chip sample along length of open-cut

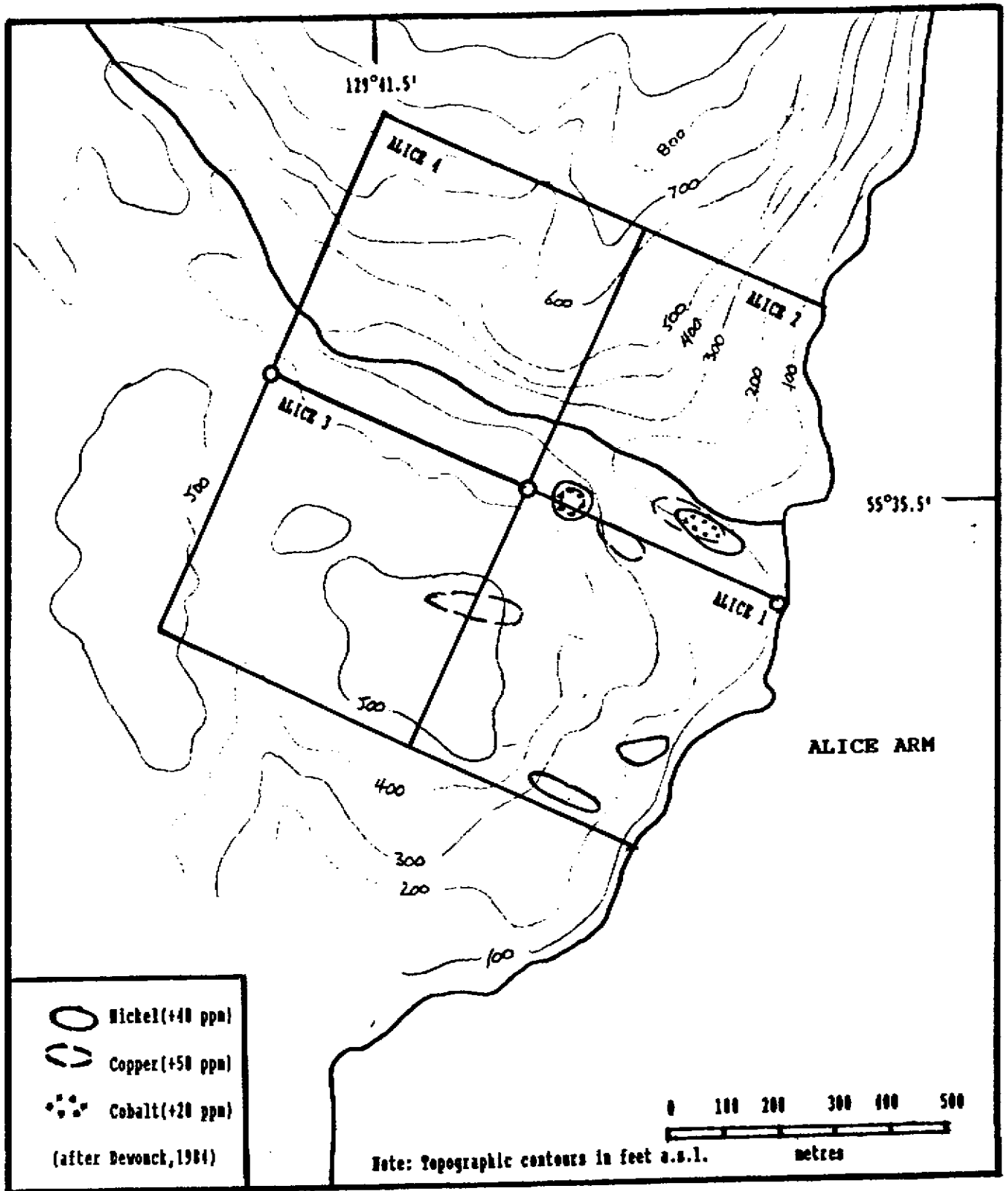


FIGURE 5a- ALICE PROPERTY - "SOIL" GEOCHEMISTRY

This zone was tested by two Winkie drill holes in 1971. Both holes intersected 3 to 4 metre lengths of olivine gabbro containing minor pyrrhotite and chalcopyrite (Seraphim,1971; Carter,1972).

Numerous other exposures of gabbro and diabase have been reported west and southwest of the Main Zone (Figure 5) including one within the southern granitic intrusive. These gabbros and diabases are believed to be younger than the Coast granitic rocks (Evenchick and Holm,1997).

Stream sediment and soil sampling in 1980 and 1984 (Burton,1980; Dewonck,1984) indicated coincident, anomalous nickel (40-160 ppm), copper (50-250 ppm) and cobalt (20-60 ppm) values downslope from the Main Zone and coincident nickel-cobalt values apparently related to gabbro-diabase exposures west of the Main Zone (Figure 5a). Weakly anomalous nickel values in stream sediments were also identified in the latter area (Burton,1980). One of the bedrock exposures in this area features partial limonite soil development. Anomalous nickel values in poorly developed also occur in the southern property area and the apparent copper in soil anomaly southwest of the Main Zone is along the flank of a granitic intrusion underlying this area (Figure 5).

A discrete magnetic high (500-800 gammas above background of 57,000 gammas) reflects the main zone. Similar

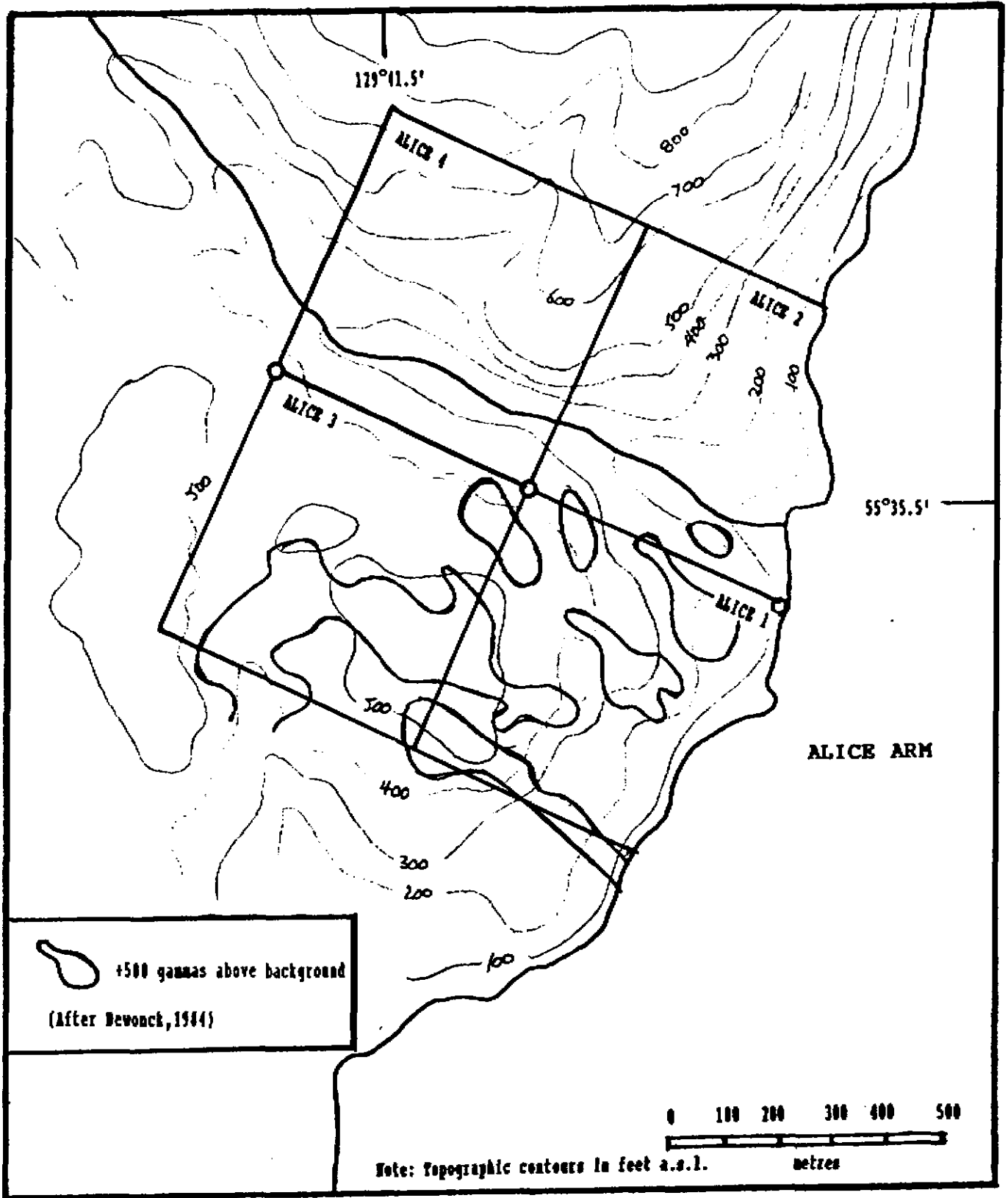


FIGURE 5b- ALICE PROPERTY - MAGNETIC RESPONSE

magnetic signatures occur to the west and south (Figure 5b) and the more widespread magnetic highs in the southern property area are apparently associated with the granitic intrusion.

1997 PROGRAM

Limited work in September of 1997 consisted of a short traverse up the main drainage and along the old telegraph line trail in order to assess the condition of the 1984 cut grid which was found to be mainly overgrown. Two rock samples, collected from shoreline exposures (Figure 5), were submitted to Min-En Laboratories for determination of 31 major and trace elements by induced coupled argon plasma (ICP) techniques and for gold contents by geochemical (aqua regia leach; atomic absorption finish) analysis.

One of the samples collected (1 - Figure 5) was from an 8 metres wide, northwest-striking basic porphyritic dyke or sill. The second sample, collected nearby (2-Figure 5), was from a limonite-stained exposure of quartz-veined siltstone. Both samples, which may be considered character samples, returned low values for most elements (Appendix I); summary results are as follows:

<u>No.</u>	<u>Cu(ppm)</u>	<u>Pb(ppm)</u>	<u>Zn(ppm)</u>	<u>Ni(ppm)</u>	<u>Co(ppm)</u>	<u>Ag(ppm)</u>	<u>Au(ppb)</u>
1	54	304	92	67	27	1.3	-
2	165	821	412	68	14	4.2	23

CONCLUSIONS AND RECOMMENDATIONS

Previous work in the area of the present ALICE claims identified the presence of a nickel-copper-cobalt (+platinum group elements) zone associated with an olivine gabbro intrusion. While it is likely that values are enhanced in the overlying gossan zone, there is no doubt that these were derived from the underlying gabbro intrusion.

Work in the early to mid-1980's was mainly directed to a reconnaissance of the area away from the principal showing which previously had been tested by only two short Winkie diamond drill holes.

This style of mineralization is unique for this area and additional work is warranted. The fact that potentially similar gabbroic intrusions may post-date Coast granitic rocks (Evenchick and Holm, 1997) opens up additional areas for investigation on the present claims.

It is recommended that additional work include further detailed sampling of the Main Zone to accurately determine platinum group element values and detailed investigation of other gabbro-dabase intrusions elsewhere on the property.

COST STATEMENTWages

- September 21/97 -

N.C. Carter - 0.25 day @ \$250 \$125.00

Transportation

Helicopter - 0.25 hours \$212.50

Analytical Costs

1 rock sample @ \$21.20 \$42.40

Report PreparationN.C. Carter - \$100.00
Duplicating, word processing 35.00**TOTAL EXPENDITURES \$514.90**

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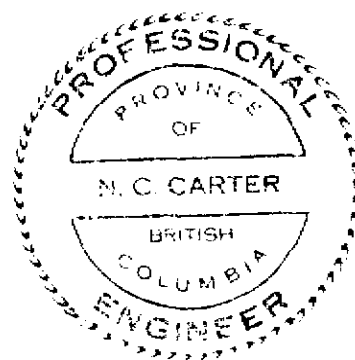
AUTHOR'S QUALIFICATIONS

I, NICHOLAS C. CARTER, of 1410 Wende Road, Victoria, British Columbia, do hereby certify that:

1. I am a Consulting Geologist, registered with the Association of Professional Engineers and Geoscientists of British Columbia since 1966.
2. I am a graduate of the University of New Brunswick with B.Sc.(1960), Michigan Technological University with M.S.(1962) and the University of British Columbia with Ph.D.(1974).
3. I have practised my profession in eastern and western Canada and in parts of the United States for more than 30 years.
4. Geological comments of the ALICE property are based on my personal observations and background knowledge of the subject property and on various reports as cited in the References section of this report.



N.C. Carter, Ph.D. P.Eng.
Victoria, B.C.
December 31, 1997



APPENDIX I
Analytical Results

COMP: R T HEARD & ASSOC.

PROJ:

ATTN: Terry Heard / Nick Carter

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FILE NO: 75-0294-RJ1+2

DATE: 97/10/01

* * (ACT:ICP 31)

SAMPLE NUMBER	AG PPM	AL %	AS PPM	BA PPM	BE PPM	BI PPM	CA %	CD PPM	CO PPM	CR PPM	CU PPM	FE %	GA PPM	K %	LI %	HG %	MW PPM	MO PPM	NA %	NI %	P PPM	PB PPM	SB PPM	SH PPM	SR PPM	TH PPM	TI %	U PPM	V PPM	W PPM	ZN PPM
2 1-52533	4.2	1.89	8	148	.1	1	.19	5.0	14	115	165	3.81	3	.64	18	1.63	265	2	.65	69	410	821	3	1	21	21	.11	5	68.6	4	412
1 1-52536	1.3	3.27	4	64	.1	1	1.67	1.2	27	62	54	4.47	4	.16	22	2.60	324	1	.30	67	1180	304	2	1	158	27	.14	6	65.2	1	92



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Date: OCT-01-97

Project:

Attn: Terry Heard / Nick Carter

We hereby certify the following Geochemical Analysis of 17 ROCK samples submitted SEP-23-97 by NICK CARTER.

Sample Number	Au-fire PPB	Au-fire g/tonne
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2	1-02535	23
1	1-02536	