Regional Geologist, Smithers **Date Approved:** 1999.04.23 **Off Confidential:** 1999.09.18

ASSESSMENT REPORT: 25838 **Mining Division(s):** Skeena

Property Name: Alice

Location:								
	NAD 27	**Latitude:** 55 25 30	**Longitude:** 129 41 00	**UTM:**	09	6142084	456750
	NAD 83	**Latitude:** 55 25 29	**Longitude:** 129 41 06	**UTM:**	09	6142269	456646
	NTS:	103P05E					

Camp: 049 Alice Arm - Anyox Area

Claim(s): Alice 1-4

Operator(s):

Author(s): Carter, Nick C.

Report Year: 1999

No. of Pages: 27 Pages

Commodities Searched For:

General Work Categories: GEOL

Work Done: Geological

GEOL Geological (100.0 ha;)

Keywords: Argillites, Chalcopyrite, Coast Plutonic Complex, Gabbros, Kunga Formation, Pentlandite, Pyrrhotite, Siltstones, Triassic

Statement Nos.: 3124834

MINFILE Nos.: 103P 110

Related Reports: 08377, 13059, 25344

GEOCHEMICAL REPORT

ON THE

ALICE NICKEL-COPPER-COBALT-PGE PROSPECT

Alice Arm
Skeena Mining Division
British Columbia

NTS: 103P/5E
55°~~35~~23.5'N 129°41.5'W

OWNER: ANGEL JADE MINES LTD.

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

DATE: JANUARY 7,1999

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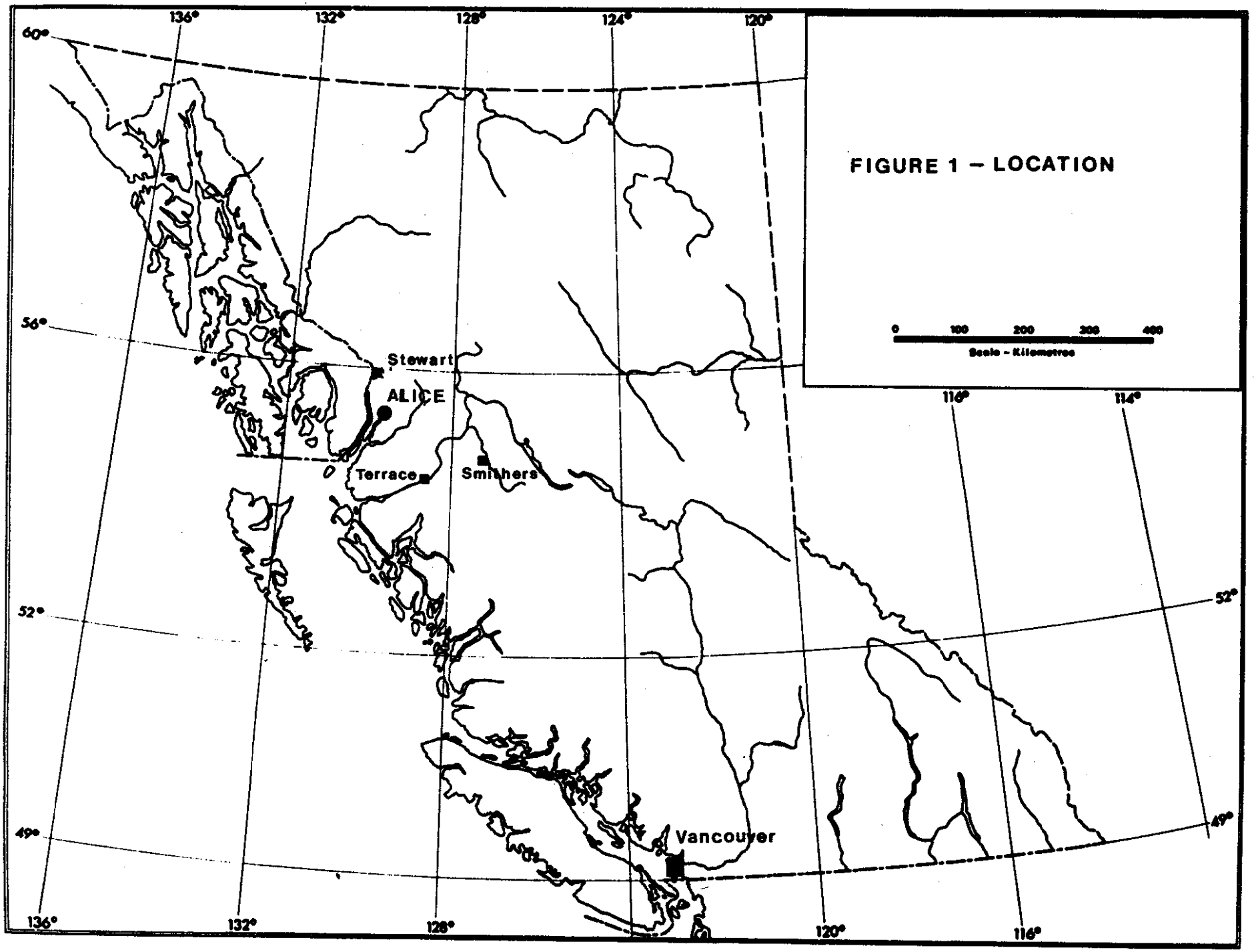

FIGURE 1 – LOCATION

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:

Claim Name	Units	Record Number	Date of Record
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 (Anyox Extension prospect -

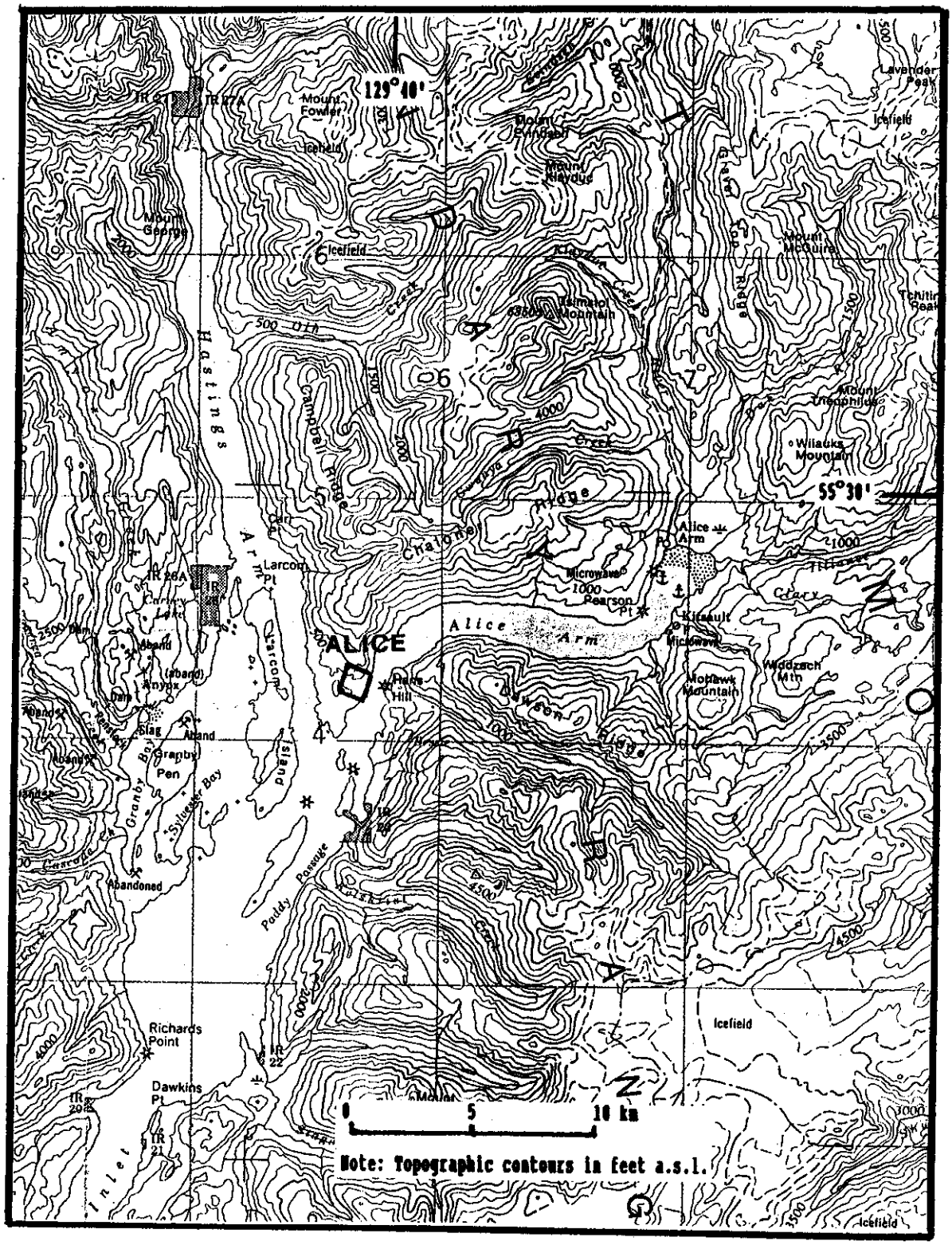

FIGURE 2 - LOCATION - ALICE PROPERTY

Hanson,1935). No further work 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 on the property 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 sampling 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 located 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 (Carter,1997).

A program conducted September 11,1998 consisted of an

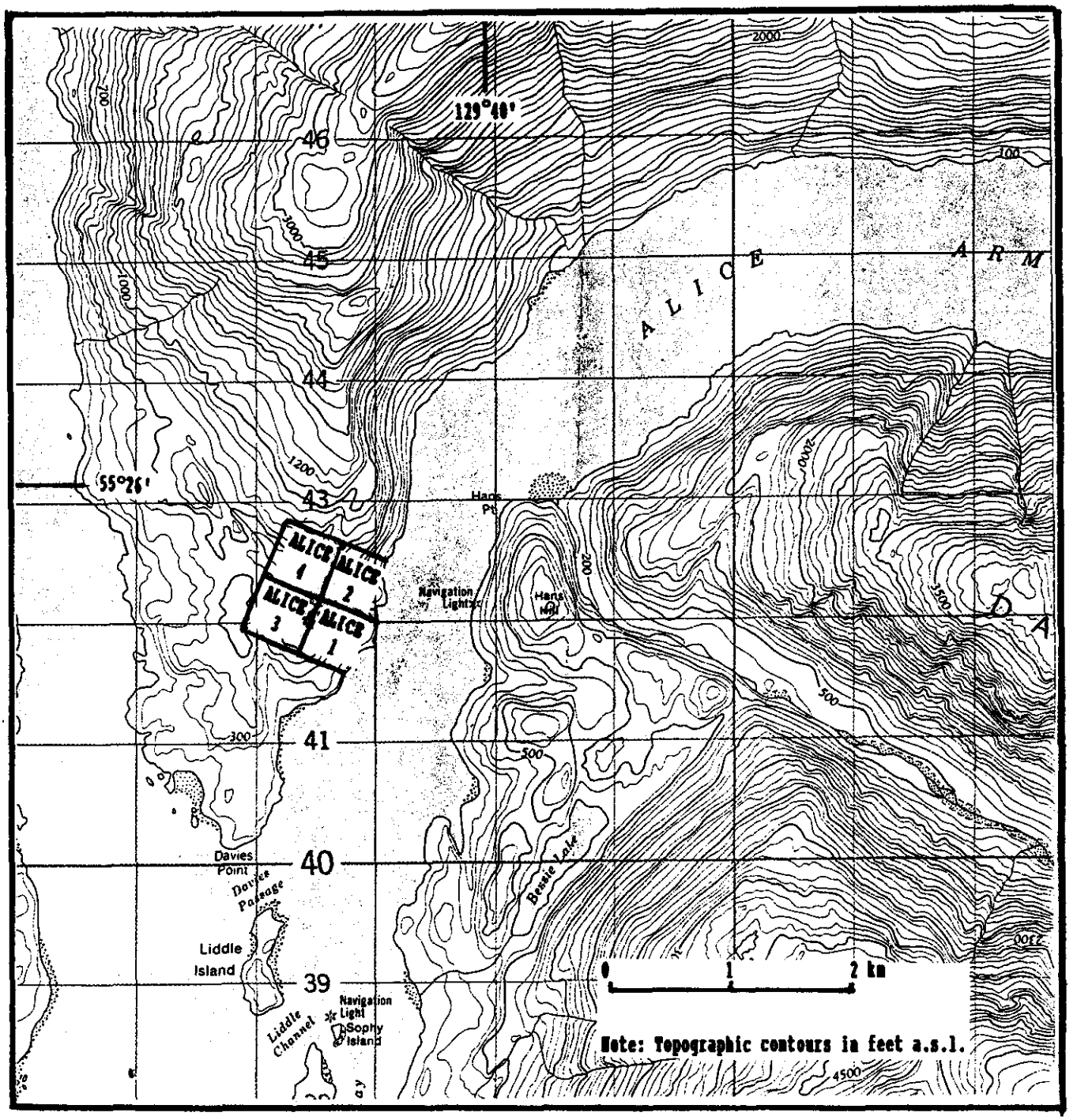

FIGURE 3 - ALICE PROPERTY - MINERAL CLAIMS

investigation of the principal known mineralized zone. Three rock samples were collected for analyses and the location of one of the previous Winkie diamond drill holes relative to the mineralized zone was established. The mainly overgrown trail between the shore and the principal zone was relocated.

For purposes of clarity, descriptions of physical setting, regional geological setting and property geology and mineralization, as contained in the writer's previous report (Carter,1997) are reproduced here as a preface to a description of the results of the 1998 program.

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 following 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 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).

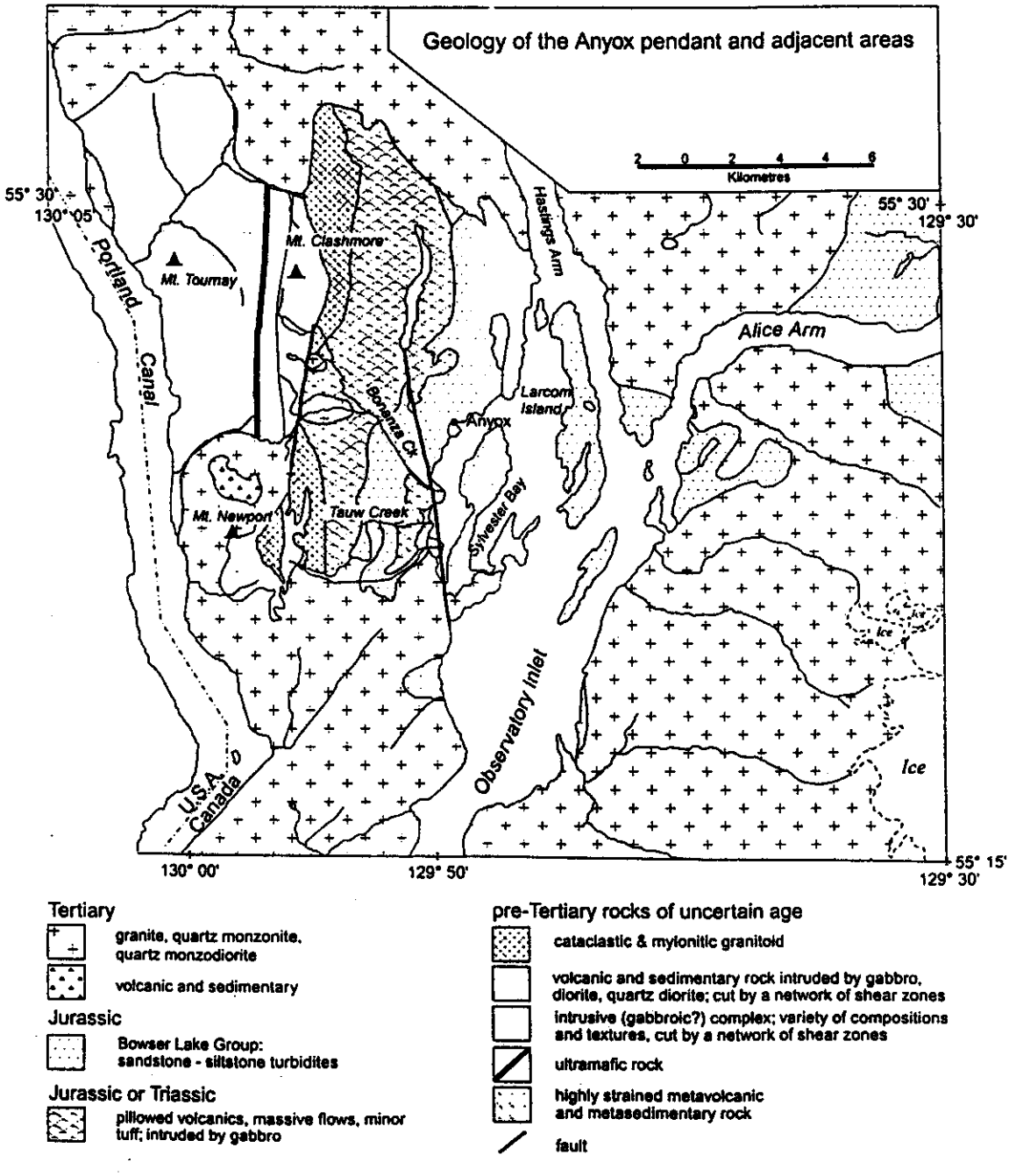

Figure 2. Sketch map of geology in Observatory Inlet (103P/5) and adjacent parts of Hastings Arm (103P/12) and 103O/9 map areas.

FIGURE 4 - (Evenchick and Holm,1997)

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 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

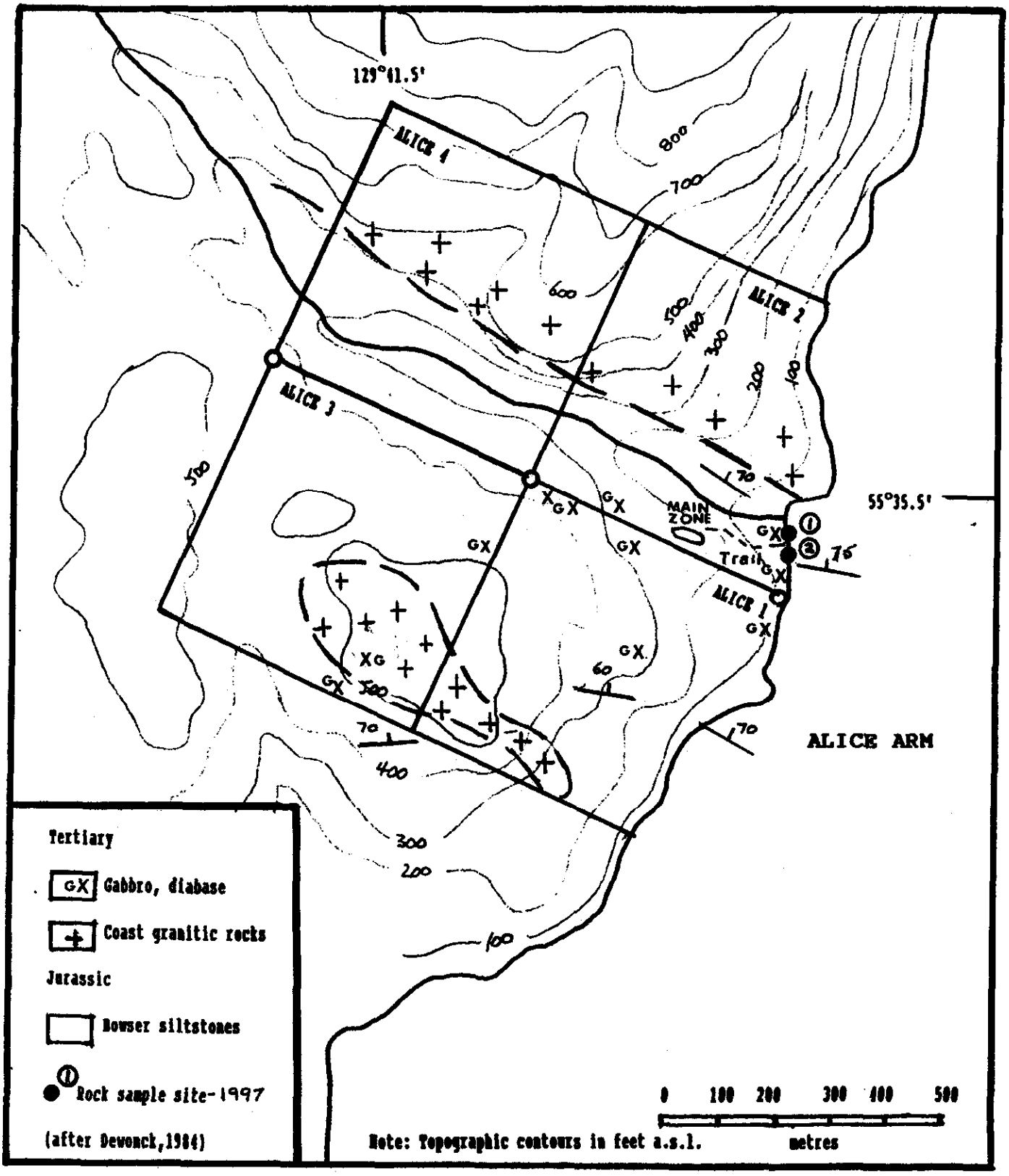

FIGURE 5 - ALICE PROPERTY - GEOLOGICAL SETTING

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:

Sample	Width(m)	Cu(%)	Ni(%)	Co(%)	Au(g/t)	Ag(g/t)	Pt(g/t)
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

This zone was reportedly partially 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

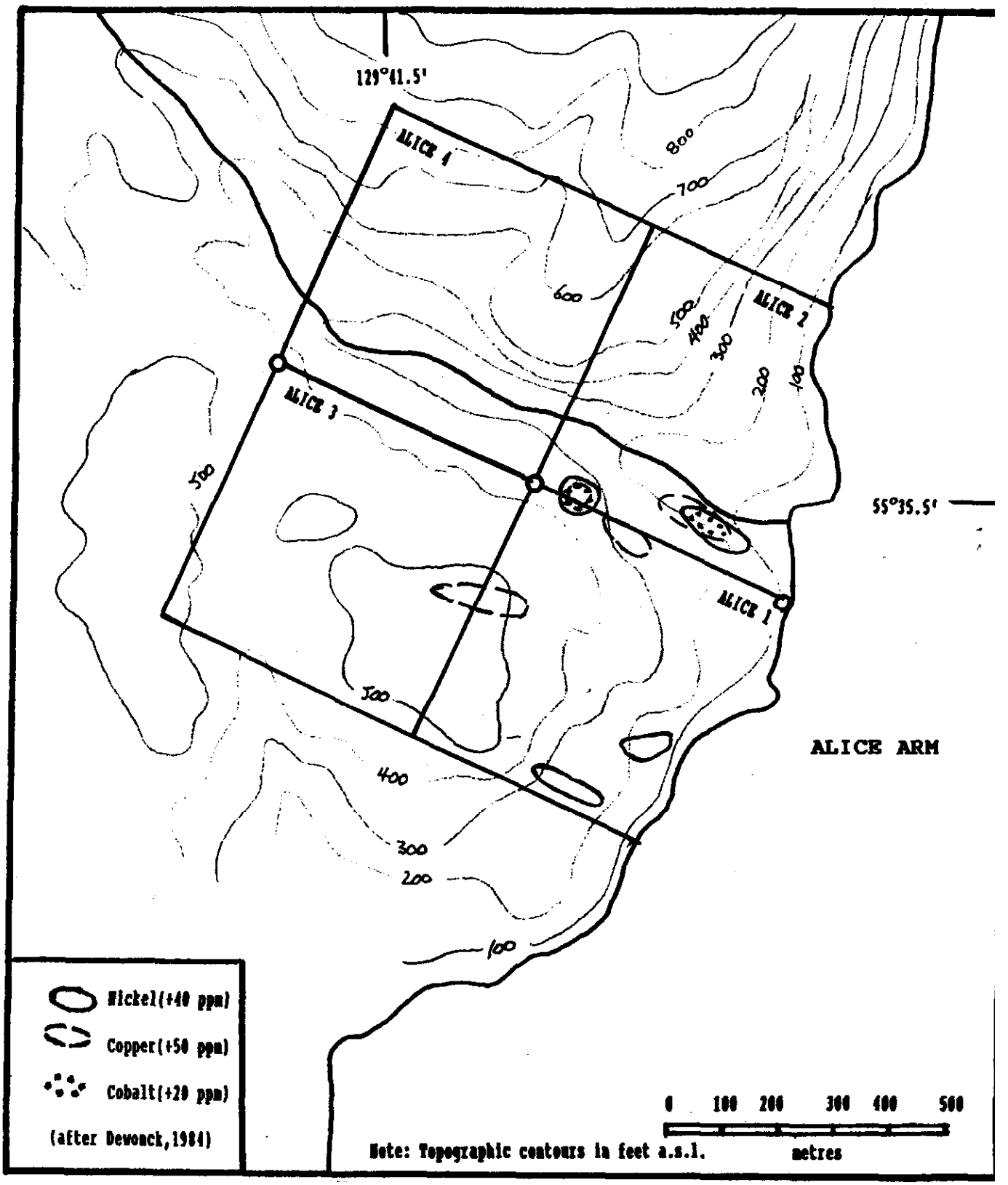

FIGURE 5a- ALICE PROPERTY - "SOIL" GEOCHEMISTRY

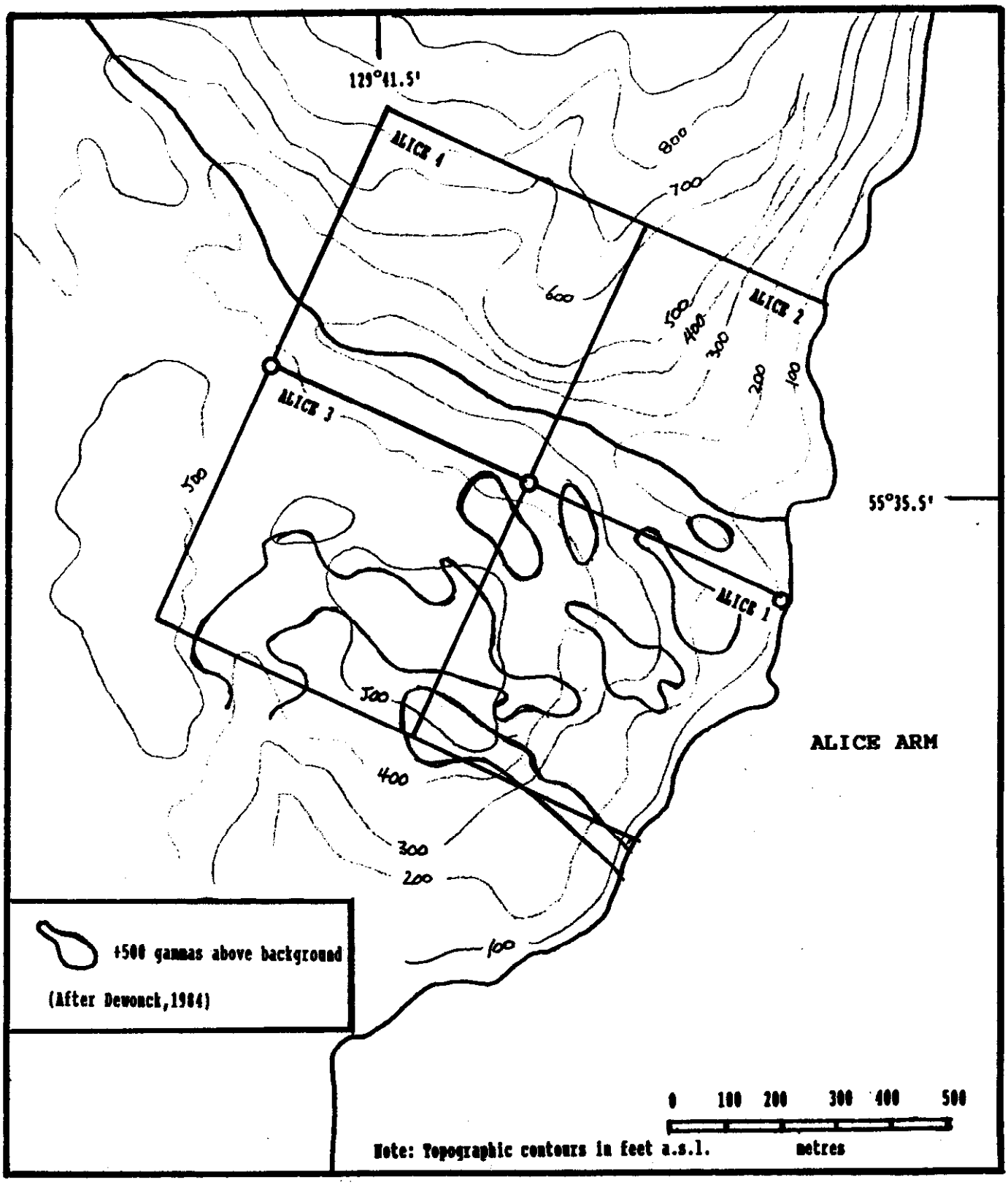

FIGURE 5b- ALICE PROPERTY - MAGNETIC RESPONSE

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 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.

1998 PROGRAM

Work in September of 1998 included relocation and flagging of the main trail leading from the shore of Alice Arm 35 metres south of the main drainage (Figure 5). This route accesses the an old campsite and continues some 150 metres to the main showing which is exposed in rock cuts.

The configuration of the hand trench is shown on Figure 6. An intensely weathered gossan and ferricrete is exposed over a length of 17 metres and a cut near the western exposed

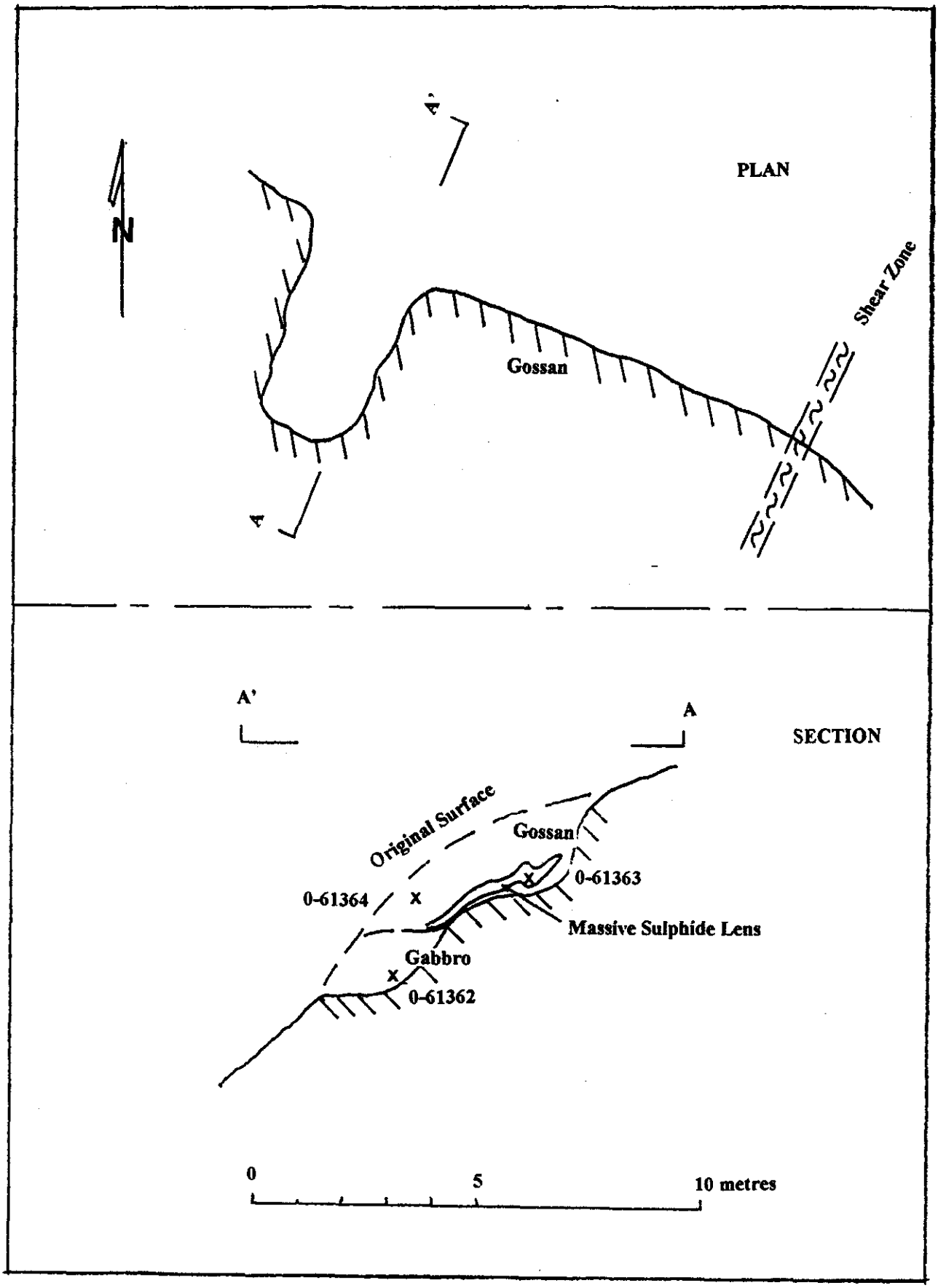

FIGURE 6 - ALICE PROPERTY - MAIN ZONE SAMPLE LOCATIONS

limits of the gossan exposes weathered, 0.30 metre rounded nodules of relatively fresh olivine gabbro containing disseminated pyrrhotite and chalcopyrite. A 0.30 to 0.50 metre thick lens of massive sulphides (pyrrhotite with lesser chalcopyrite and pentlandite(?)) is exposed near the base of the cut.

Three character rock samples collected from the rock cut (Figure 6) were submitted to Min-En Laboratories for determination of 30 major and trace elements by induced coupled argon plasma (ICP) techniques and for gold by fire geochem with atomic absorption finish and for platinum and palladium by fore geochem, with ICP finish.

Sample locations are shown on Figure 6 and complete analytical results are contained in Appendix I. The first sample (0-61362) was collected from olivine gabbro containing disseminated sulphides; the second (0-61363) from the massive sulphide lens and the third from the leached ferricrete capping above the sulphide zone. Summary results are as follows:

Sample No.	Cu(ppm)	Ni(ppm)	Co(ppm)	Pt(ppb)	Pd(ppb)	Au(ppb)
0-61362	966	405	82	13	18	-
0-61363	6784	4528	479	98	191	-
0-61364	3892	1359	54	-	-	182

This mineralized zone had been previously tested zone by two short Winkie diamond drill holes in 1971. One of these drill sites was found 23 metres on a bearing of 295 degrees

from the western end of the trench areas. This and a second hole, reportedly 15 metres northeast of the trench, were apparently inclined holes which would not have tested the area immediately below the rock cut.

CONCLUSIONS AND RECOMMENDATIONS

Previous and more recent work in the area of the present ALICE claims has confirmed the presence of a nickel-copper-cobalt (+platinum group elements) zone associated with an olivine gabbro intrusion.

It is probable that base and precious metals values are enhanced in the highly weathered, near surface zone exposed by hand trenching. The potential of the zone for both disseminated and massive sulphide mineralization to depth and along strike remains unknown.

As noted in the writer's 1997 report (Carter,1997), 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 delineation of the Main Zone and detailed investigation of other gabbro-diabase intrusions elsewhere on the property.

COST STATEMENT

Wages	
- September 11/98 -	
N.C. Carter - 0.50 day @ $500	$250.00
R.T. Heard - 0.50 day @ $500	$250.00
Transportation	
Helicopter - Bell Long Ranger @ $1,100/hour - - 0.8 hour	$900.00
Support Costs	
Hotel, meals -September 11/98	($150.62)
Analytical Costs	
2 samples @ $30.50	$61.00
1 sample @ $22.25	$22.25
	$83.25
Report Preparation	
N.C. Carter - 0.70 day	$350.00
Duplicating, word processing	$46.75
	$396.75
TOTAL EXPENDITURES	**$1,860.00**

REFERENCES

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Dewonck, Bernard(1984): Report on the Sea Otter Claim, Skeena Mining Division, B.C., MEI Assessment Report 13059

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Hanson, George(1935): Portland Canal Area, British Columbia, Geological Survey of Canada Memoir 175, p.88

Seraphim, R.H.(1971): Haywire Nickel, Alice Arm, MEI Property File

STATEMENT OF QUALIFICATIONS

R.T. HEARD, P.ENG.

- Graduate - Haileybury School of Mines
- Graduate - Geological Engineering, Montana Tech
- Geological Engineer - United Keno Hill Mines, Elsa, Yukon, Occidental Coal, Red Deer, Alberta
- Exploration Manager, Equity Silver Mines Ltd.
- Consulting Geological Engineer - western Canada and U.S.

AUTHOR'S QUALIFICATIONS

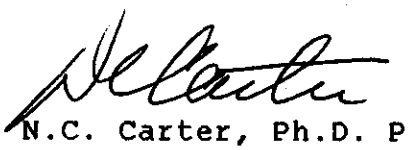
I, NICHOLAS C. CARTER, of 1410 Wende Road, Victoria, British Columbia, do hereby certify that:

1. I am a Consulting Geologist, registered with the Association of Professional Engineers and Geoscientists of British Columbia since 1966.

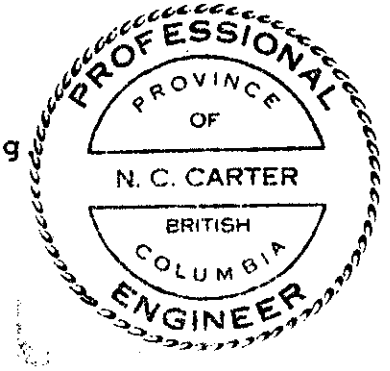
2. I am a graduate of the University of New Brunswick with B.Sc.(1960), Michigan Technological University with M.S.(1962) and the University of British Columbia with Ph.D.(1974).

3. I have practised my profession in eastern and western Canada and in parts of the United States for more than 30 years. 5

4. The foregoing report on the Alice property is based on 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.
January 7,1999



APPENDIX I

Analytical Results

MINERAL ENVIRONMENTS LABORATORIES LTD.

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8S-0087-RG1

Company: R.T.HEARD JOINT VENTURES

Sep-22-98

Project:

Attn: Nick Carter / Terry Heard

We *hereby certify* the following Geochemical Analysis of 8 ROCK samples submitted Sep-14-98 by NICK CARTER.

Sample Name	Au-fire PPB	Pt-fire PPB	Pd-fire PPB
0-61362		13	18
0-61363		98	191
0-61364	182		

Mineral Environments Laboratories
8282 Sherbrooke St., Vancouver, B.C., V5X 4E8
Tel (604) 327-3436 Fax (604) 327-3423

R.T.HEARD JOINT VENTURES

Attention: Nick Carter / Terry Heard

Project:

Sample: ROCK

MULTI-ELEMENT ICP ANALYSIS

Aqua Regia Digestion

Sample Number	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm
0-61362	0.8	1.31	<5	100	<0.5	<5	1.26	2	82	73	966	7.59	0.23	12.43	835	<2	0.15	405	1520	8	5
0-61363	5.2	1.55	<5	40	0.5	<5	0.18	41	479	68	6784	>15.00	0.03	5.73	425	<2	0.04	4528	590	64	5
0-61364	5.8	0.68	<5	70	<0.5	5	0.22	3	54	78	3892	>15.00	0.05	2.86	295	<2	0.05	1359	930	82	5