

RECONNAISSANCE GEOCHEMICAL SURVEY OF THE
BOLT CLAIM

Skeena Mining Division

103I/1W

(54°11'North and 128°26' West)

OWNER and OPERATOR

CANADIAN NICKEL COMPANY LIMITED

#160 - 10451 Shellbridge Way

Richmond, British Columbia

V6X 2W8

by

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July 17, 1980

MINERAL RESOURCE BRANCH

ASSESSMENT REPORT

8578

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Établie en 1964, par la DIRECTION DES LEVÉS ET DE LA CARTOGRAPHIE, MINISTÈRE DE L'ÉNERGIE, DES MINES ET DES RESSOURCES. Imprimée en 1967.

La déclinaison magnétique pour 1964 varie de 27'00" Est au centre de la limite Ouest à 26'47" Est au centre de la limite Est. Variation moyenne annuelle 3.5' Ouest.

FIGURE 1: PROPERTY LOCATION MAP
 N.T.S. 103 I
 1:250,000 scale

I. INTRODUCTION

The Bolt claim is situated some 38 kilometres south-southeast of Terrace, or some 20 kilometres northeast of Kitimat, along a northwesterly draining tributary of Bolton Creek located in the Kitimat Ranges of the Central Coast Mountains of B.C. (Fig. 1). The claim is about 20 minutes flying time by helicopter from Terrace. The property consists of 20 units, four south and five east, which was staked by Canico on June 23, 1980 on the basis of an anomalous stream sediment reported by the B.C. Ministry of Energy, Mines and Petroleum Resources in their geochemical release of June 6, 1980. Property evaluation conducted on June 22 and 25, 1980 consisted of follow-up geochemical sampling and prospecting, reported herein. A total of 32 samples were collected consisting of 14 rocks and 17 sediments and one soil.

II. REGIONAL GEOLOGY

The Bolt claim is underlain by a uniform white granodiorite of upper Cretaceous age belonging to the Coast Mountains granitic complex. The white granodiorites are relatively uniform in texture consisting of quartz, feldspar, biotite, and minor hornblende but may show porphyritic textures locally.

III. PROPERTY GEOLOGY

Reconnaissance sampling indicates that the claim is underlain by a variety of intrusive rock units of indeterminate composition. These are locally intruded by veins of milky quartz carrying disseminated chalcopyrite and molybdenite associated with pyrite. Secondary alteration minerals such as pyrite, limonite, hematite, kaolinite and chlorite are widespread and more detailed mapping is required to outline the extent of the relatively low grade mineralization observed.

IV. GEOCHEMISTRY

An anomalous stream sediment collected by the B.C. Ministry of Mines at the mouth of the creek draining the Bolt Claims yielded ppm values of 7 Mo, 46 W and 56 F. Detailed stream sediment follow-up and stream course prospecting shown on Figure 2 and Table 1, indicates that the source of the anomaly appears to be mineralized quartz veins cutting granitic rocks at the headwaters of the Creek at elevations above 3,000 feet above sea level on the western portion of the claim block. Further prospecting and sampling between the upper drainage basin is required to assess the economic significance of this stream sediment anomaly.

TABLE 1. BOLT CLAIM GEOCHEMICAL SAMPLE LIST

SAMPLE NUMBER	PPM MO	PPM CU	REMARKS
DLD 24B-L	1	14	Soil sample containing granitic pebbles & grit.
25 -S	4	20	Local granitoid contains ch veining & rusty disseminations.
26 -S	13	26	Sampled in an area of feldspar porphyry float.
27 -S	7	48	Sampled from three phase alluvium.
28 -S	15	142	Local o/c leuco-granodiorite & mesocratic granodiorite.
29 -R	230	3400	Quartz vein containing moly & cp.
30 -S	25	80	Local outcrop - granodiorite fractured, kaolinized & cut by mafic dykes.
31 -S	21	98	Stream boulders include granitoids containing He vein fillings.
32 -S	22	78	
33 -S	11	58	
34 -R	3	98	Stream cobble with cp & moly paint.
35 -S	31	108	
36 -R	5	94	Containing py & he.
37 -S	12	64	
38 -R	19	460	Granitoid containing py, mt, sp.
39 -S	13	54	
66 -R	1	4	Chip sample granitoid & feldspar porphyry (aphanitic).
67 -R	1	4	Chip sample granitoid & aphanitic dyke.
68 -R	1	4	Iron stained granitoid & aphanitic feldspar porph.
69 -R	1	20	Stream gravels analyzed.
70 - R	10	22	Slightly rusty granitoid, green-grey felsite, quartz porph, melano feldspar porph.
71 -R	1	4	Leuco feldspar porph, granitoid, mesocratic feldspar porph.

TABLE 1. (continued)

SAMPLE	PPM MO	PPM CU	REMARKS
DLD 72 -S	14	20	
73 -R	18	90	Mt & he, granitoid containing ch & ep, mafic dyke.
74 -R	4	100	Qtz veins, mafic dyke, granitoid.
75 -S	53	260	Flood debris.
76 -R	28	42	Highly altered granitoid.
77 -S	16	54	
78 -R	300	124	Qtz, py, moly, mt vein, alteration zone, country rock.
79 -S	32	104	
64042-S	10	49	(4 ppm W), Cooke 1979.
64115-P	6		(180 ppm W), Cooke 1979.
787050-S	6	106	G.S.C. samples.
787056-S	2	50	" "
787057-S	1	52	" "
787059-S	1	48	" "

AUTHOR'S QUALIFICATIONS

I, Peter S. Peto, hereby certify as follows:

I am graduate geologist with B.Sc. and M.Sc. degrees from the University of Alberta, and a Ph.D. from the University of Manchester, England.

I am a registered member, in good standing, of the Geological Association of Canada.

I am currently employed as project geologist with Canadian Nickel Company Ltd. in the Vancouver district office.

I have been practising my profession intermittently since 1970 and continuously from 1975 to present.

I have prepared this work assessment report on the basis of work performed as an agent of Canico.

Peter S. Peto
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July 18, 1980

