

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT

NO. 2972 MAP.....

13/1/70
REPORT OF THE
GEOCHEMICAL SOIL SURVEY
ON THE
COUGAR GROUP OF CLAIMS, BABINE AREA, B.C.
FOR
NITTETSU MINING COMPANY LIMITED

JULY 29 - 31, 1970

LATITUDE 54° 40' N

LONGITUDE 126° 15' W

2972

BY
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BARRINGER RESEARCH LIMITED
1198 WEST PENDER STREET
VANCOUVER, B.C.

LIST OF CONTENTS

	<u>PAGE</u>
Introduction	1
Results	2
Recommendations	3
Cost Estimate for Survey	4
Certificate of Qualification	follows page 4
Appendix I - Laboratory Reports	

LIST OF DRAWINGS

<u>DWG. NO.</u>	<u>TITLE</u>	<u>SCALE</u>
X 4-137-3	Locality Plan (follows page 1)	
4-137-4	Geochemical Soil Survey -- Total Copper	1"=1000'

INTRODUCTION

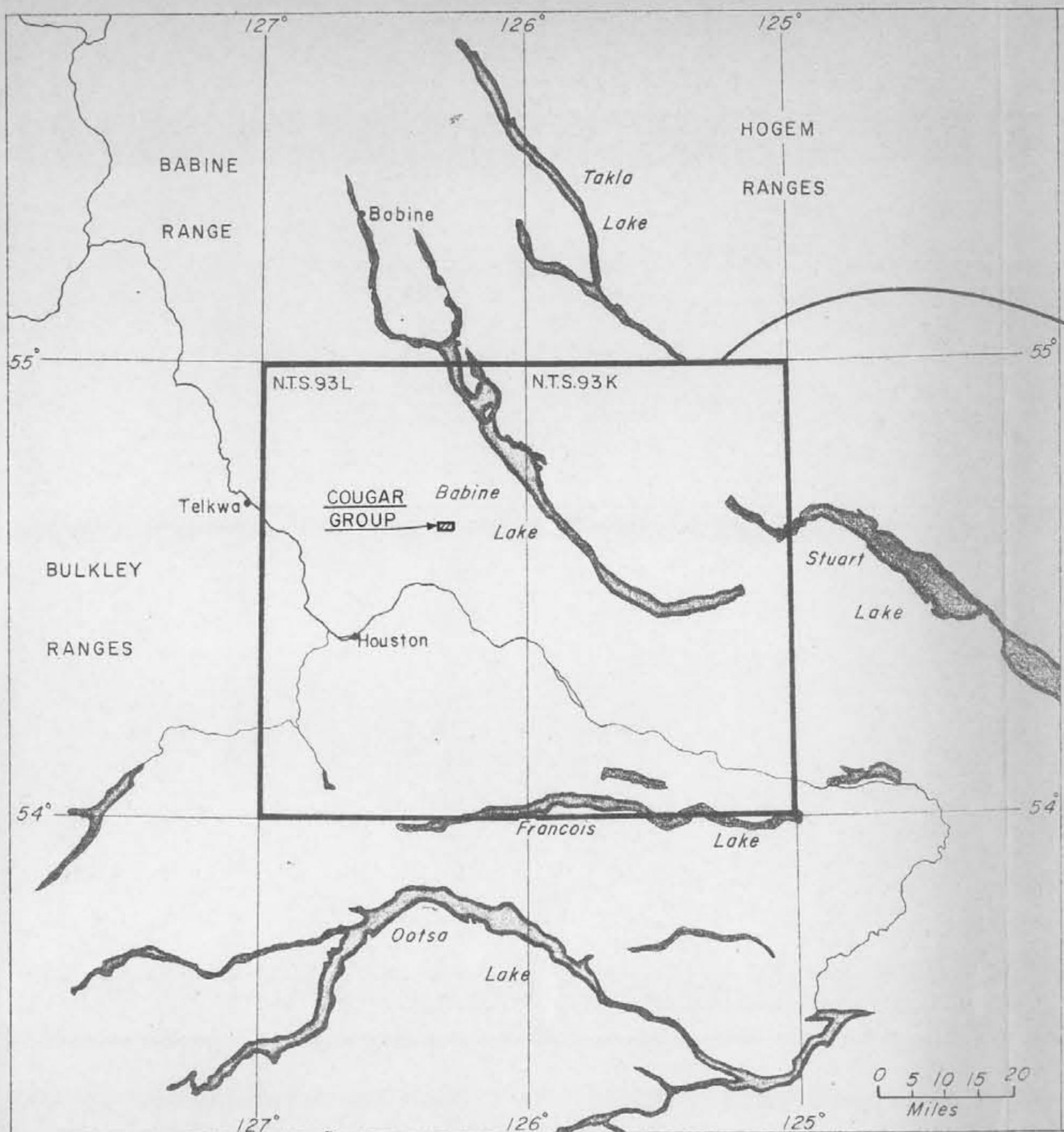
A geochemical reconnaissance soil survey was carried out on the Cougar 1 - 40 Claims by Barringer Research Limited, during the period of July 29th to July 31st inclusive. A total of 205 samples were collected, of which 201 were soil or bog samples and 4 were stream sediment samples. The collection was done by G. Rowe of Vancouver, and L. Rasminsky and J. Larway of Toronto.

The Cougar Group is situated approximately 10 miles south of Topley Landing, B.C. Access is by the Granisle road. The area is gently rolling, and completely bush covered. Bogs occupy low-lying areas.

The Cougar Group lies within the Jurassic Hazelton group of volcanics and sediments. Outcrop is very scarce. The soils vary from a well-drained regosol on the topographic highs, to a thick peat-like bog in the topographic lows. In all cases, the B horizon was sampled using a grub hoe. Small streams meander through the bogs. The bogs generally are underlain by a grey clay. In some instances the bog bottoms were beyond the reach of the six foot bog augers and could not be sampled. The samples were packed in heavy kraft paper envelopes.

The purpose of this survey was to perform a reconnaissance study at a minimum expense to assess the potential value of the Cougar Group. Soil samples were taken on 1000 foot lines at 400 foot intervals. The bog bottoms were sampled using a tube-type auger. Using this spacing, it was felt that broad areas of potential economic mineralization would be recognized, although narrow vein type mineralization could be easily missed. All lines were run by pace and compass.

The soil and stream samples were sent to the Barringer Research Limited Laboratory in Vancouver, where they were analysed for total copper in the case of soils; and 0.5N HCl copper for stream sediments. The samples were oven dried, sieved to -80 mesh with nylon screening, and a 0.2 gram cut was taken. For soils, the cut was digested in 0.5N hydrochloric acid. The solutions were analysed for copper using atomic absorption instrumentation. The analysis was performed by Miss Y. Hazeldene.



BW June

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ASSESSMENT REPORT
 NO. **2972** MAP **41**



Work undertaken by *Roger Cavén*
BARRINGER RESEARCH LTD, Toronto, Canada.

NITTETSU MINING CO. LTD.
COUGAR CLAIM GROUP, BABINE AREA, B. C.
 LOCALITY PLAN
 NOV. 1970 DWG. 4-137-3

RESULTS (DWG. NO. 4-137-4)

The statistics for the Cougar Group samples are as follows:-

	<u>ppm Cu</u>
Median	17
Std. Dev.	10
Background	0 - 40
Threshold	40
3rd Order Anomaly	41 - 55
2nd Order Anomaly	56 - 70
1st Order Anomaly	>70

The background copper value for this area is about the average found in the Hazelton Formation. The pattern of distribution of the values is unimodal, and represents only one rock type and very little if any mineralization.

The above threshold values which occur on the Cougar Group are, for the most part, isolated spot highs. The two highs on Line 110E are due to contamination from the road and power line. The two point anomaly on Line 60E is low and could be attributed to natural bog accumulation, this should be checked however. On Line 40E there are two spot highs which are the highest naturally occurring copper values found on the property. The topography in this area is very smooth, and these samples could also be bog accumulation.

As one proceeds west towards Baboon Lake, the topography becomes extremely smooth, and bogs are prevalent. There is not an accumulation of copper in this low lying area, which indicates that there is little or no copper mineralization draining into the lake.

RECOMMENDATIONS

1. I recommend that check samples of the anomalies on Lines 40E and 60E be taken. The samples should be on 100 foot spacings and 200 foot lines and extend at least 400 feet either side of the anomaly.
2. Swamp bottom samples should be taken near the anomalies with a tube auger. Mineralization will tend to show itself at this swamp-swamp bottom interface.
3. Further work on the Cougar claims should await the results of the above follow-up work.

BARRINGER RESEARCH LIMITED

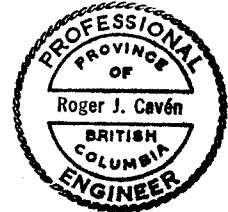
BW Smee

B. W. Smee, Geochemist

Endorsed by:

Roger J. Caven

R. Caven, P. Eng.



December 24, 1970
Vancouver, B. C.

COST ESTIMATE FOR COUGAR GROUP

Field Work:-

Mobilization	\$ 175.00
9 man days @ \$75.00 per day	\$ 675.00
Plotting, Reporting, Supervision @ \$125.00 per day	\$ 250.00
Drafting	\$ 125.00

Laboratory:-

205 samples @ \$1.20 per sample	\$246.00
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TOTAL \$1471.00

Declared before me at this *City*
of *Langford*, in the
Province of British Columbia, this *16*
day of *April* 1971, A.D.

Akiyama

Jui Jui
A Commissioner for taking Affidavits within British Columbia or
A Notary Public in and for the Province of British Columbia.

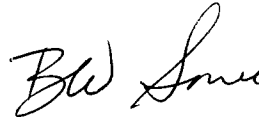
SUB - MINING RECORDER

C E R T I F I C A T E

I, Barry W. Smee, of the city of Vancouver, in the Province of British Columbia hereby certify:-

1. THAT I am a geochemist employed by Barringer Research Limited, 1198 West Pender Street, Vancouver, British Columbia.
2. THAT I am a graduate of the University of Alberta with the degree of BSc. in geology and chemistry.
3. THAT I am an Associate Member of the Society of Exploration Geochemists.
4. THAT I have held a responsible position in the field of geochemistry for at least one year.

Dated at Vancouver, British Columbia this 24 day of DEC 1970

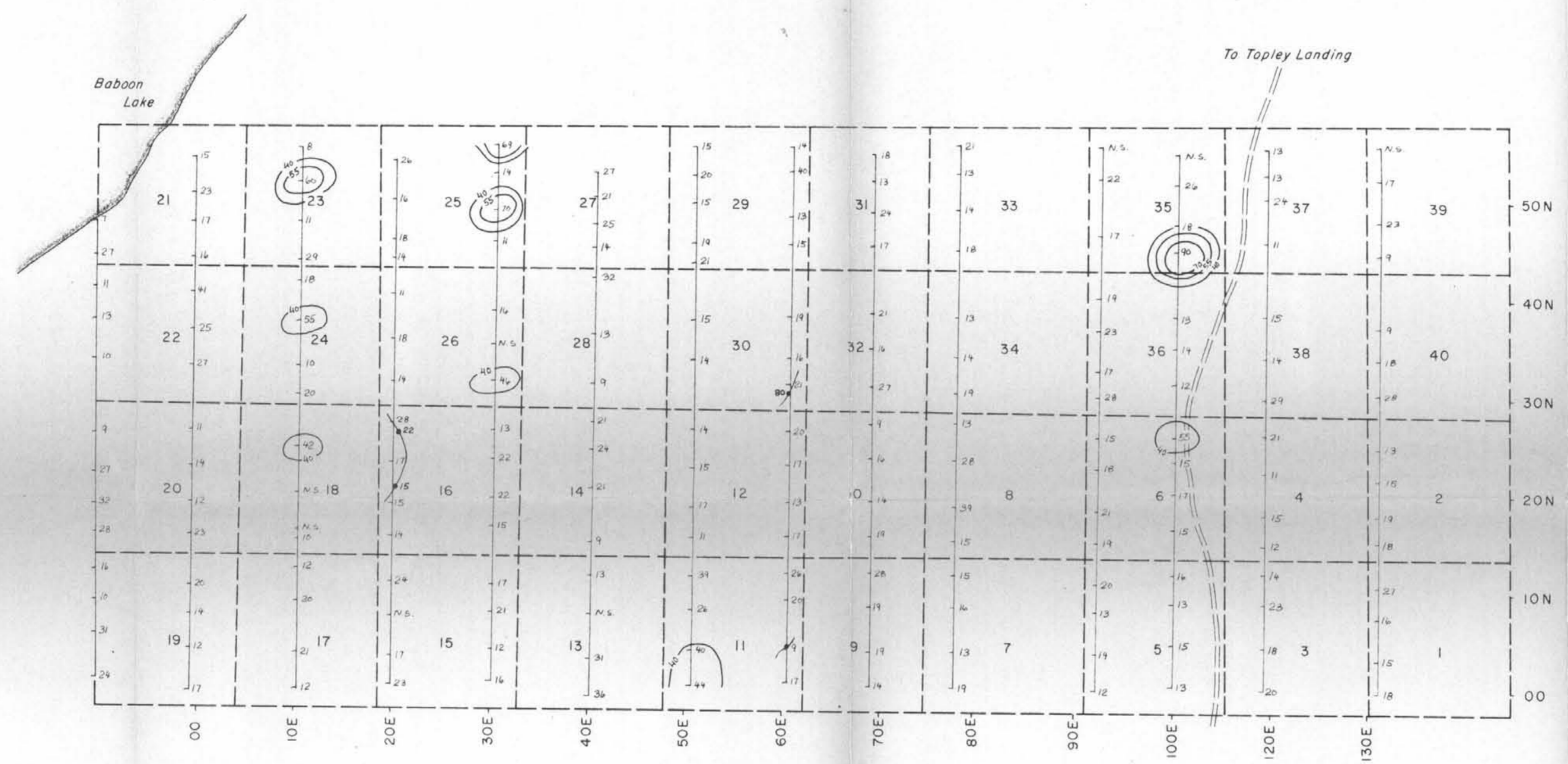


B. W. Smee

APPENDIX I
LABORATORY REPORTS

Sample No.	Total Cu ppm		Sample No.	Total Cu ppm		Sample No.	Total Cu ppm		Sample No.	Total Cu ppm
24	27		51	15		78	N.S.		105	44
25	25		52	17		79	13		106	17
26	41		53	28		80	9		108	20
27	16		54	14		81	21		109	26
28	17		55	18		82	24		110	17
29	23		56	11		83	21		111	13
190'N of 19 30	15		57	14		84	9		112	17
31	8		58	18		85	13		113	20
32	60		59	16		86	32		114	21
33	11		60	26		87	14		115	16
34	29		61	69		88	25		116	19
35	18		62	14		89	21		117	15
36	55		63	70		90	27		118	13
+75'N 37	10		64	11		91	15		119	40
38	20		65	16		92	20		120	14
+100'N 39	42		66	N.S.		93	15		121	18
40	N.S.		67	46		94	19		122	13
41	N.S.		68	13		95	21		123	24
41	10		69	22		96	15		124	17
+40'N 42	12		70	22		97	14		125	21
-25'S 43	20		71	15		98	14		126	16
+75'NE 44	21		72	17		99	15		127	27
+75'W 45	12		100's 73	21		100	17		128	9
46	23		74	12		101	11		129	16
47	17		75	16		102	39		130	14
40	24		250'E 76	36		103	26		131	19
50	14		77	31		104	40		132	28

Sample No.	Total Cu ppm		Sample No.	Total Cu ppm		Sample No.	Total Cu ppm		Sample No.	Total Cu ppm
133	19		160	21		-50S 187	29			
134	19		161	19		188	21			
135	14		+25N 162	20		+75'N 189	11			
136	19		163	13		190	15			
137	13		164	14		191	12			
138	16		165	12		192	14			
139	15		166	13		193	23			
140	15		167	15		194	18			
141	39		168	13		+100'W 195	20			
142	28		169	16		196	18			
143	13		170	15		197	15			
144	19		171	17		198	16			
145	14		172	15		-100'S 199	27			
146	13		173	55		200	18			
147	18		174	12		201	17			
148	14		175	14		150'Wide 202	15			
149	13		176	13		203	13			
150	21		177	90		204	28			
151	N.S.		100'E 178	18		205	18			
152	22		+75'S 179	26		206	9			
153	17		180	N.S.		-100'S 207	9			
154	19		181	13		208	23			
155	23		182	13		-100'S 209	17			
+25'N 156	17		183	24		210	N.S.			
-100S 157	28		184	11						
+50'W 158	15		185	15						
159	18		186	14						



Department of
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STPS

2972

M-2

To Accompany Report by B.W. SMee
on the Cougar Claim Group, Babine Area, B.C.



LEGEND

- 34 Soil Sample Location & Total Copper (ppm)
- 35 Stream Sediment Sample, 0.5N HCl Copper (ppm)
- Background 0 - 40 p.p.m.
- Threshold 40 p.p.m.
- 3rd Order Anomaly 41 - 55 p.p.m.
- 2nd Order Anomaly 56 - 70 p.p.m.
- 1st Order Anomaly > 70 p.p.m.

B.W. Sme



Work undertaken by
BARRINGER RESEARCH LTD., Toronto, Canada.

NITTETSU MINING CO. LTD.		
COUGAR CLAIM GROUP, BABINE AREA, B.C.		
GEOCHEMICAL SOIL SURVEY TOTAL COPPER		
NOV. 1970	SCALE: 1"=1000'	DWG. 4-137-4