

COMINCO LTD.

EXPLORATION
NTS: 92I/10

WESTERN DISTRICT
21 July 1980

ASSESSMENT REPORT

PERCUSSION DRILLING

RAG, HAPPY DAYS MINERAL CLAIMS,

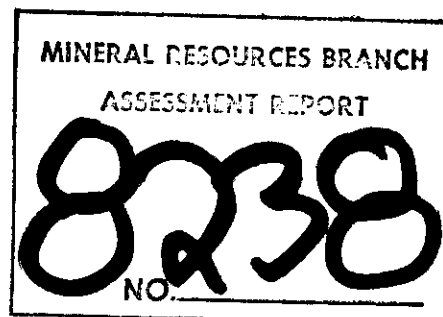
DURAND LAKE AREA,

KAMLOOPS MINING DIVISION

50°36' 120°42'

Work Performed Between

June 18 and June 26, 1980



INTRODUCTION

This report describes a percussion drilling program carried out on RAG 89, 100 and HAPPY DAYS #9(Record #2100). The claims are situated 27 km west south west of the City of Kamloops in the southern B.C. Interior. Access is via the Dominic Lake road. The attached plan shows the position of the claims tested in relation to latitude 50°36'N and longitude 120°42'W as well as Durand Lake.

SUMMARY

Cominco Ltd. is the registered owner of the claims tested. The drill target, a weak I.P. anomaly, was indicated by a 1979 survey done by the owner. The anomaly is underlain by Upper Triassic flows and pyroclastic and a possible coeval diorite-monzonite stock (the Durand Lake stock). These rocks are locally capped by Tertiary basalts and pyroclastics of the Kamloops Group. Scattered occurrences of chalcocite, malachite and chrysocolla are known in the area north and south of the Tertiary capping.

The percussion holes were designed to test for possible occurrences of such mineralization under the Tertiary capping and the immediately adjacent Nicola volcanics and Durand Lake Stock.

HISTORY

Soil sampling was carried out in the area by Noranda Exploration in 1967 on their GB claims. Part of this information is available in assessment report #1099. Cominco Ltd. located claims in the area in 1969 and carried out programs of geological mapping, soil sampling and I.P. at different intervals. An I.P. survey carried out in 1979 provided a drill target in an area of geology favourable to the occurrence of secondary copper mineralization.

PERCUSSION DRILLING

A total of 326 m(1070 feet) was drilled in five vertical holes. Broken ground prevented a number of holes from attaining the target depth of 300 feet.

Conventional ten-foot samples, representing a 1/16 split were collected in plastic refuse containers. Excess water was decanted after a settling agent had been added. The remaining sludge was placed in sludge cutter bags for removal of most of the remaining water. Damp samples, contained in sludge cutter bags, were placed in plastic bags. The samples were then taken to Cominco's Exploration Research Laboratory in Vancouver for processing. The samples were analyzed for copper, lead, zinc, silver, manganese, molybdenum and gold by standard geochemical techniques.

The sludge was examined at the drill site for rock type, mineralization and alteration using a hand lens. This is sufficient to indicate these parameters and give some indication of the metal content.

TREATMENT OF DATA

The attached plan at a scale of 1" = 400 feet, including metric scale bar, shows the position of the drill holes in relation to immediate and adjoining claims, roads and the topographic features.

The lithologies encountered in the drill holes are noted in the percussion drill logs.

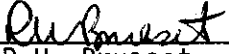
The assay results are attached to this report.

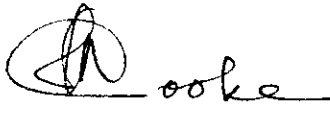
CONCLUSIONS


No mineralization of economic interest was encountered in any of the five percussion holes covered by this report.

Basalt of the Kamloops Group contain about 50 ppm Cu. Diorite of the Durand Lake stock encountered in P.H. RAG 80-2 average 196 ppm. Nicola volcanics intersected by P.H. RAG 80-3,4 average 100 and 118 ppm, respectively.

Composite assays for Pb, Zn, Ag and Mn are similarly low.

Report by: 
R.U. Bruaset
Project Geologist

Endorsed by: 
D.L. Cooke
Senior Geologist

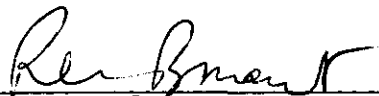
Endorsed for release by:  for G.H.
G. Harden
Manager, Exploration
Western District

RUB/skg

STATEMENT OF QUALIFICATIONS

1. I, Ragnar U. Bruaset, with business address: Cominco Ltd. 409 Granville St., 7th Floor, Vancouver, B.C. V6C 1T2, supervised the percussion drilling program described in this report.
2. I graduated in 1967 with a degree of B.Sc. from the University of British Columbia.
3. I have been employed by Cominco Ltd. continuously since May 1968 to the present.
4. I have been connected with the exploration activity of Cominco Ltd. on the RAG claims since 1969 and on the HAPPY DAYS claims since 1978.

Signed: _____



R.U. Bruaset
Project Geologist

ATTACHMENTS

Drilling Plan 1" = 400'

Appendix 1 Percussion Drilling Logs

Appendix 2 Assay Sheets

Appendix 3 Cost Estimate

References

1. Assessment Report 1099

Brynelson, B.O., Knauer J.D. Geochemical Soil Survey G.B. Mineral
Claims.

APPENDIX 1

Percussion Drill Logs

RAG & HAPPY DAYS MINERAL CLAIMS

P.H. RAG 80-1

<u>Depth (feet)</u>	<u>Notes</u>
0 - 15	Overburden
15 - 90	Black amygdaloidal basalt containing abundant thinly banded agate. No sulphide noted. Agate material up to 40% of cuttings in individual 10-foot samples. This basalt is presumed to be Kamloops Group. Hole abandoned due to caving and stuck rods. All equipment recovered from the hole. End of Hole at 90'

P.H. RAG 80-2

0 - 25	Overburden
25 - 160	Diorite. Strongly oxidized. Traces of sulphides. Fairly abundant magnetite.
160 - 200	Leucocratic intrusive containing up to 5% pyrite. Epidote noted.
200 - 290	Diorite. Estimated 0.5% pyrite. Abundant magnetite, some epidote. Plagioclase is generally fresh. Traces of chalcopyrite noted at 250 - 260', 380 - 290'.
290 - 320	Leucocratic intrusive containing minor pyrite. End of Hole at 320'

P.H. RAG 80-3

0 - 10	Overburden
10 - 300	Andesitic volcanics (Nicola Group) Epidote common and chlorite after mafics. Magnetite common. Minor pyrite to 160', than $\frac{1}{4}$ to $\frac{1}{2}\%$ - No copper minerals noted. End of Hole at 300'

Depth (feet)	Notes
<u>P.H. RAG 80-4</u>	
0 - 5	Overburden
5 - 90	Andesitic volcanics (Nicola Group) intruded by diorite dykes. Traces of pyrite. Minor quartz with orange limonite at end of hole. Hole was lost due to caving & stuck drill rods which were recovered.
	End of Hole at 90'
<u>P.H. R.L. 80-1</u>	
0 - 5	Overburden
5 - 90	Variously red & black anygdaloidal basalt. Minor agate (Kamloops Group).
90 - 220	Diorite containing magnetite, epidote & traces of pyrite. Chlorite, after mafics.
220 - 270	Leucocratic diorite. Plagioclase appears to be altered. Trace to ¼% pyrite in individual samples.
	End of Hole at 270'

RAG GROUP

JOB V80 - 050

REPORTING DATE 15 JUL 1980

SAMPLE NUMBER	FIELD NUMBER	TYPE	Cu PPM	Mo PPM
PH RAG 80-1		0 - 15'	OVERBURDEN	
R80 11776	12252	I	55	4
R80 11777	12253	I	40	3
R80 11778	12254	I	37	4
R80 11779	12255	I	35	2
R80 11780	12256	I	45	3
R80 11781	12257	I	53	3
R80 11782	12258	I	56	4
R80 11783	12259	I	48	4
R80 11784	12260	I	278	2
R80 11785	12261	I	419	5
R80 11786	12262	I	249	2
R80 11787	12263	I	129	2
R80 11788	12264	I	117	<2
R80 11789	12265	I	182	3
R80 11790	12266	I	193	3
R80 11791	12267	I	175	4
R80 11792	12268	I	277	2
R80 11793	12269	I	164	2
R80 11794	12270	I	109	<2
R80 11795	12271	I	89	<2
R80 11796	12272	I	289	<2
R80 11797	12273	I	273	2
R80 11798	12274	I	183	4
R80 11799	12275	I	114	3
R80 11800	12276	I	67	3
R80 11801	12277	I	105	4
R80 11802	12278	I	125	4
R80 11803	12279	I	316	3
R80 11804	12280	I	665	4
R80 11805	12281	I	202	3
R80 11806	12282	I	164	3
R80 11807	12283	I	256	3
R80 11808	12284	I	134	2
R80 11809	12285	I	109	2
R80 11810	12286	I	311	4
R80 11811	12287	I	116	<2
R80 11812	12288	I	45	2
R80 11813	12289	I	310 - 320 end 3R	<2

PH RAG 80-2

RAG GROUP

JOB V80 - 0503

REPORTING DATE 15 JUL 1980

SAMPLE NUMBER	FIELD NUMBER	TYPE	Cu PPM	Mo PPM
PH RAG 80-3				
R80 11814	12316	I 10 - 20'	24	<2
R80 11815	12317	I	187	2
R80 11816	12318	I	23	<2
R80 11817	12319	I 40 - 50	156	<2
R80 11818	12320	I	166	<2
R80 11819	12321	I	180	<2
R80 11820	12322	I	87	<2
R80 11821	12323	I	51	<2
R80 11822	12324	I 90 - 100	31	<2
R80 11823	12325	I	113	<2
R80 11824	12326	I	138	<2
R80 11825	12327	I	323	<2
R80 11826	12328	I	197	<2
R80 11827	12329	I 140 - 150	86	<2
R80 11828	12330	I	108	<2
R80 11829	12331	I	151	<2
R80 11830	12332	I	57	<2
R80 11831	12333	I	37	<2
R80 11832	12334	I 190 - 200	69	<2
R80 11833	12335	I	29	<2
R80 11834	12336	I	177	<2
R80 11835	12337	I	85	<2
R80 11836	12338	I 230 - 240	129	4
R80 11837	12339	I	86	4
R80 11838	12340	I	98	3
R80 11839	12341	I	35	5
R80 11840	12342	I	24	2
R80 11841	12343	I	27	<2
R80 11842	12344	I 290 - 300	26	<2
R80 11843	12345	I 5' - 20'	42	<2
R80 11844	12346	I	44	<2
R80 11845	12347	I	91	<2
R80 11846	12348	I 40 - 50	88	<2
R80 11847	12349	I	78	<2
R80 11848	12350	I	188	<2
R80 11849	12351	I	228	<2
R80 11850	12352	I 80 - 90 end	188	<2

PH RAG 80-4

ROPER LAKE

JOB V80 - 050

REPORTING DATE 21 JUL 1980

SAMPLE NUMBER	FIELD NUMBER	TYPE	Cu PPM	Mo PPM	Mo (1) %
PH RL 80-1		0 - 5' OVERBURDEN			
R80 11867	12290	I	32	3	<.001
R80 11868	12291	I	34	2	<.001
R80 11869	12292	I	36	3	<.001
R80 11870	12293	I 40 - 50	35	3	<.001
R80 11871	12294	I	35	3	<.001
R80 11872	12295	I	35	2	<.001
R80 11873	12296	I	39	2	<.001
R80 11874	12297	I	47	3	<.001
R80 11875	12298	I 90 - 100	68	<2	<.001
R80 11876	12299	I	68	<2	<.001
R80 11877	12300	I	64	<2	<.001
R80 11878	12301	I	75	<2	<.001
R80 11879	12302	I	76	2	<.001
R80 11880	12303	I 140 - 150	82	<2	<.001
R80 11881	12304	I	65	<2	<.001
R80 11882	12305	I	73	<2	<.001
R80 11883	12306	I	73	<2	<.001
R80 11884	12307	I	91	<2	<.001
R80 11885	12308	I 190 - 200	52	<2	<.001
R80 11886	12309	I	52	<2	<.001
R80 11887	12310	I	38	<2	<.001
R80 11888	12311	I	44	<2	<.001
R80 11889	12312	I	42	4	.002
R80 11890	12313	I	35	5	<.001
R80 11891	12314	I	36	<2	<.001
R80 11892	12315	I 260 - 270	38	2	<.001

REPORTING DATE 15 JUL 1980

PAGE

WHERE ANALYSIS REQUESTED BUT NO VALUES SHOWN, RESULTS ARE TO FOLLOW

ANALYTICAL METHODS

Mo HNO3 - HCL04 DIGESTION / COLORIMETRIC
Cu AQUA REGIA DIGESTION / AA

RAG GROUP

JOB V80 - 05

REPORTING DATE 15 JUL 1980

SAMPLE NUMBER	FIELD NUMBER	TYPE	Pb PPM	Zn PPM	Ag PPM	Mn PPM	Au PPB
COMPOSITE SAMPLES							
R80 11851	12252-12255		<4	118	<.4	1091	<10
R80 11852	12256-12259		<4	107	<.4	1188	<10
R80 11853	12260-12264		<4	34	<.4	529	20
R80 11854	12265-12269		<4	37	<.4	700	70
R80 11855	12270-12274		4	36	<.4	799	180
R80 11856	12275-12279		<4	31	<.4	471	40
R80 11857	12280-12284		<4	31	<.4	570	80
R80 11858	12285-12289		<4	27	<.4	436	130
R80 11859	12316-12320		<4	24	<.4	298	80
R80 11860	12321-12325		13	18	<.4	234	
R80 11861	12326-12330		<4	20	<.4	256	38
R80 11862	12331-12335		<4	16	<.4	200	70
R80 11863	12336-12340		<4	20	<.4	186	40
R80 11864	12341-12344		<4	19	<.4	234	250
R80 11865	12345-12348		<4	22	<.4	161	<10
R80 11866	12349-12352		<4	20	<.4	186	70

WHERE ANALYSIS REQUESTED BUT NO VALUES SHOWN, RESULTS ARE TO FOLLOW

ANALYTICAL METHODS

AU AQUA REGIA DIGESTION / SOLVENT EXTRACTION / AA
 Pb Zn Ag Mn AQUA REGIA DIGESTION / AA

APPENDIX 3

Cost Estimate

Direct costs:	1070 feet @ 5.00/foot	\$ 5,350.00
Indirect costs:	Analytical work	225.00
Access:	Roads	4,033.61
Transportation:		435.25
Salaries:	R.U. Bruaset 7 days @ \$191.79	1,342.57
	D.M. Carr 7 days @ \$ 92.29	688.05
	M.L. Serack 7 days @ \$101.82	712.75
Domicile:		<u>916.12</u>
		\$ 13,703.35
	Cost/foot =	\$ 12.81

TO WEST

3

2

Durand L.

GREENSTONE MTN.
GIL 2
685(1)

Kwilakwila
L. 2196
(10)

HAPPY DAYS 12
2197(10)

Grace L.

HAPPY DAYS 13
2198(10)

HAFI, CAT 6
1336 (8)

RAG 100
2099 (9)

HAPPY DAYS
5
1735 (3)

HAPPY DAYS
169 (12)

HAPPY DAYS 4
1334 (6)

DOMINIC NORTH
474(8)

DOMINIC LAKE
473(8)

G.G. 1
1855 (6)

Cornwall L.

DOMINIC SOUTH
475(8)

Dominic L.

Roper L.

Chuwhe L.

DOMINIC
SOUTHEAST

HAPPY DAYS 3
1113 (2)

HAPPY DAYS 9
2194(10)

Andrew L.

1386 (8)

HAPPY DAYS
10
2195(10)

HAPPY DAYS
8
1982(7)

HAPPY DAYS 7
1981(7)

JBL 1
2415(2)

CHERISE
1404 (9)

HAPPY DAYS
16
2232 (11)

HAPPY DAYS 15
2231(11)

HAPPY DAYS 17
2233(11)

AMRON 1
2229(11)

AMRON 2
2230(11)

Face lake

Wyse lakes

G.C. 6 G.C. 5
2748(7) 2747(7)

CHUWHELS

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT

8238

NO.