WESTERN DISTRICT JUNE 15, 1978

### PERCUSSION DRILLING - REG PROPERTY

WORK ON REG 2 & 11, ACE NO. 1 AND CROWN GRANT 1560

GRANDVIEW SKI-HILL-AREA, KNUTSFORD

KAMLOOPS M.D., B.C.

LONGITUDE: 120°19'30" LATITUDE: 50°35'00"

WORK PERFORMED DURING PERIOD MAY 12 - JUNE 15, 1978

### INTRODUCTION

This report describes a percussion drilling programme recently conducted on the REG Property in the Iron Mask batholith in south central B.C. This is a porphyry copper prospect of the alkaline variety. Great Plains Development Company of Canada Ltd. owns the property and Cominco Ltd. is the operator under terms of an August 20th, 1977 option agreement.

### PREVIOUS WORK

During the early 1970's Great Plains conducted geological and geophysical programs on the I.M. claims which they held under option and their own REG, BYR claims and Crown Grants 1560, 61 and 62 also owned by Great Plains. This work also included considerable diamond and percussion drilling on targets within the above-noted claims and crown grants.

### DRILLING TARGETS

Cominco Ltd. tested induced polarization anomalies indicated by the geophysical survey of Great Plains and partially tested by their own drilling. Cominco Ltd. considered the area to be of interest because of the occurrence of favourable host rocks which have been fractured, altered and mineralized. Mineralization occurring in and around incompletely tested I.P. anomalies indicated that further drilling ought to be carried out.

#### PERCUSSION DRILLING

A total of 488 m (1610 feet) in 7 holes ranging in depth from 61 to 91 m (200 - 300 feet) were carried out on REG 2 & 11 and ACE No.1 M.C.'s and Crown Grant 1560. The cuttings were samples at an interval of ten feet (3.3m)

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT

NO.\_\_\_\_\_

throughout the bedrock sections. The samples were strained of much of their contained water with the aid of filter bags, then packed in plastic bags and taken to the Vancouver Laboratory of Cominco Ltd. for routine geochem. (A.A) analytical procedures. Selected samples containing better than normal grade copper mineralization were sent to General Testing Laboratory for check assay.

Selected drill cuttings were examined briefly at the drill site using a ten power hand lens. This type of examination is capable of identifying major rock units, alteration, and type and approximate amounts of sulphide present. This data is presented under Rock Description.

### ROCK DEFINITION

For the purposes of this report the Cherry Creek and Sugarloaf units are distinguished on "monzonitic" vs "dioritic" appearance. The distinction here applied depends on the relative abundance of pink feldspar (some of which may be plagioclase), since neither of these rocks contain appreciable quartz, and the distinction on the basis of the shape of the mafics (Ken Northcote, personnel communication), is applied with difficulty to cuttings.

### ROCK DESCRIPTION

PH REG 78-1 (Elevation: 3400'; Depth: 60.6 m)

<u>Interval</u>	Lithology	Description
0 - 5' (0 - 1.5 m)	Overburden -	
5 -100° (1.5 -30.3 m)	Cherry Creek Unit	Monzonitic intrusive, abundant kspar and epidote, 3% pyrite, minor chalcopyrite.
100-110' (30.3-33.3 m)	Sugarloaf Unit	Strongly epidotized, dioritic looking-rock (low kspar). Fairly heavy chalcopyrite. est 0.5 to 0.8% Cu cpy»py.
110-200' (33.3-60.6 m)	Sugarloaf Unit	Similar to 100-110' but containing only minor chalcopyrite, 1-2% pyrite, generally, but occasionally up to 3% in some samples. Strongly epidotized.

PH REG 78-2 (Elevation:	3390'; Depth: 91 m)	
Interval	Lithology	Description
0 - 5' (0 - 1.5 m)	0verburden	
5 -300' (1.5 - 91 m)	Sugarloaf Unit	Dioritic-looking intrusive. Contains minor kspar, has abundant epidote (3%), chloritized matrix. Generally 1% pyrite but pyrite decreases to <1/2% at the bottom of the hole. 3-4% fine grained magnetite, traces of chalcopyrite.
PH REG 78-3 (Elevation:	3400'; Depth: 61 m)	
0 - 5 <sup>1</sup> (0 - 1.5 m)	<b>Overburden</b>	-
5 -200' (1.5 - 61 m)	Sugarloaf_Unit	Dioritic intrusive with very little kspar. Pyrite ½%. Minor epidote. Traces of chalcopyrite.
PH REG 78-4 (Elevation:	3350'; Depth: 61 m)	*.
0 - 5' (0 - 1.5 m)	0verburden	
5 - 70°(1.5 -21.2 m)	Sugarloaf Unit	Fresh dioritic looking in- trusive containing ½% pyrite, minor kspar and traces of chalcopyrite.
70 -100° (21.2-30.3 m)	Cherry Creek Unit	Kspar-rich intrusive with 2-3% pyrite.
100-130' (30.3-39.39m)	Cherry Creek Unit	Chloritized mafics. Abundant ksapr <1% pyrite. Trace chalcopyrite.
130-200' (39.39-61 m)	Cherry Creek Unit	Abundant kspar, 1-2% pyrite less towards bottom of hole. chloritic mafics.
PH REG 78-5 (Elevation:	3200'; Depth 61 m)	
0 - 25' (0 - 7.6 m)	0verburden	

Interval	Lithology	Description
25 -200° ( 7.6- 61 m)	Cherry Creek Unit	Abundant kspar, 1% pyrite minor epidote, < ½% pyrite, chloritized mafics, trace chalcopyrite.
PH REG 78-6 (Elevation: 3	175'; Depth 73 m)	
0 - 14' ( 0 - 4.2 m)	Overburden	
14 - 60' ( 4.2- 18 m)	Sugarloaf Unit	Dioritic looking intrusive containing very little kspar, <a href="#"></a> /½% pyrite, minor chalcopyrite, mafics chloritized. Plagioclase possibly kaolinized as drill sludge runs milky white.
60 - 70' ( 18 -21.2 m)	Sugarloaf Unit	Dioritic intrusive containing heavy chalcopyrite estimated 2% Cu.
70 -200' (21.2- 61 m)	Cherry Creek Unit	Abundant kspar, minor chalcopyrite, 1% pyrite at 110-120'. < 12% pyrite by 200', milky white sludge near end of hole.
200-240' ( 61 - 73 m)	Leucocratic intrusive	Plagioclase slightly altered, very little kspar《½% pyrite. Traces of chalcopyrite.
PH REG 78-7 (Elevation: 3	100'; Depth: 81.8 m)	
0 -74° ( 0 -22.4 m)	0verburden	
74 -270' (22.4-81.8 m)	Cherry Creek Unit	Chloritized mafics through- out. Sludge usually is milky white indicating possible kaolinization. <<>\footnote{\chi_2\%} pyrite, traces of chal- copyrite.

# CONCLUSIONS

Short intersections of interesting copper mineralization are encountered in REG 78-1 and 6. Further work is required to determine the structure, the grade and extent of this mineralization. A number of additional

percussion holes are planned for the area between the two above noted intersections, where the I.P. responses are somewhat weaker than the areas drilled. A difference in the relative proportion of pyrite and copper sulphides could explain the indicated differences in I.P. response. Economically significant mineralization could be present if the pyrite content were low.

Report by:

R.U. Bruaset, B.Sc Project Geologist

Endorsed by

F.L. Wynne, B.Sc. Senior Geologist

Approved for Release by:

G. Harden, PhD

Manager, Exploration, Western District

RUB: qk

### Attachments:

Index Map - Plate 1 Drilling Plan - Plate 2 Statement of Qualifications Statement of Expenditure Assay Sheets

# COMINCO LTD.

# **EXPLORATION**

WESTERN DISTRICT
June 15, 1978

# EXHIBIT "A"

# STATEMENT OF EXPENDITURE

(Work Performed May 12 - June 15, 1978)

Alan Miller Percussion Drilling Ltd. 1610 feet (488 m) @ \$3.60/foot (\$11.88/m)	\$5,796.
Miscellaneous Assaying, sample bags, sampling equipment	925.
Salary - R.U. Bruaset - 10 days - F.J. Ferguson - 4 days	1,300. 290.
Transportation	240.
Domicile	237. \$8,788.

Cost/foot = \$5.46

Cost/meter = \$18.02

### COMINCO LTD.

### **EXPLORATION**

WESTERN DISTRICT

IN THE MATTER OF THE B.C. MINERAL ACT

IN THE MATTER OF A PERCUSSION DRILLING PROGRAMME

CARRIED OUT ON THE REG PROPERTY

LOCATED IN THE KNUTSFORD AREA

IN THE KAMLOOPS M.D.

PROVINCE OF BRITISH COLUMBIA

MORE PARTICULARLY N.T.S. 92 I/9W

### <u>AFFIDAVIT</u>

- I, RAGNAR U. BRUASET, of the City of Vancouver in the Province of British Columbia, make oath and say:
- THAT I am employed as a geologist by Cominco Ltd. and, as such, have a personal knowledge of the facts to which I hereinafter depose;
- THAT annexed hereto and marked as "Exhibit A" to this my affidavit is a true copy of expenditures incurred on percussion drilling on the REG Property;
- 3. THAT the said expenditures were incurred between the 12th day of May 15th of June, 1978 for the purposes of mineral exploration on the above noted property.

SWORN BEFORE ME AT THE CITY
OF VANCOUVER IN THE PROVINCE
OF BRITISH COLUMBIA THIS

20 2 DAY OF

1978.

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RAGNAR U. BRUASET

### COMINCO LTD.

### EXPLORATION

### WESTERN DISTRICT

### STATEMENT OF QUALIFICATIONS

I, RAGNAR U. BRUASET, with business address at 409 Granville Street, Vancouver, British Columbia, V6C 1T8, do hereby certify that I have supervised the percussion drilling programme on the REG Property.

### I also certify that:

- 1. I am a graduate of the University of British Columbia with a degree of B.Sc. in Geology 1967.
- That I have been involved in exploration work for Cominco Ltd. since 1967 and that I have been involved in all phases of porphyry copper exploration and development since 1968 to the present.
- 3. That I have been closely involved with the exploration work on the REG Property during the period 1977 to the present.

Respectfully submitted:

R.U. Bruaset, B.Sc Project Geologist E.R.LAB JOS NO. 1398

REPORTING DATE 7 JUNE 1978

7. 0	ROCK SERIES		w	(CHEC	- •		
6		· · · <del>- · - · - · · · ·</del>	CUp	SAMPLI	) FOOTAGE		
2	R78 Q2540	87359	183		5'-20'		
- 1	R78 <b>0</b> 2541	87360	· · · · <del>· -</del> · · · · · · · · · · · · · · · · · ·		201-301		
: 1	R78 02542	87361	165		30'-40'		
: 1	R78 02543	87362	182		40'-50'		
•	R78 02544	<del>87363 -</del>	1.55		50'-60'	<del></del>	
	R78 02545	87364	172		60'-70'		
وا	R78 02546.~	87365	184		<b>70'-</b> 80'		
9	<del>R78 -025</del> 47	87 <del>366</del>	315		80+-90+		<del></del>
10	. R78 02548	87367	510		90'-100'	REG 78-1	
113	R78 02549	87368	7450	(7500)	100'-110'	OVERBURDEN	
12	<del>R78 0255</del> 0	<del>87367</del>	270		110'-120'	0-5	······································
Ιł	R78 02551	87370	274	•	120'-130'		
1.4	R78 02552	87371	422		130'-140'		
13		<del>87372 -</del>	330		140'-150'		·
16	R78 02554	87373	394		150'-160'		
17	R78 02555	87374	302		160'-170'		
18	<del></del>	<del>87375 -</del>	367	·	<del>- 170'-</del> 180'		
19	R78 02557	87376	344		180'-190'		
71	R78 02558	87377	278		190'-200'	END	
22		- 87 <del>376</del>	300-	(313)	5'-20'		
22	R78 02560	87379	306	` '	20'-30'		
24	R78 <b>0256</b> 1	87380	164		30'-40'		
25	<del>- R78 02562 -</del>	<del>- 87381 -</del>	324		40'-50'	<del></del>	. *:
26	R78 02563	87382	184		50'-60'		. <b>2</b> 5
27	R78 02564	87383	368	-	60'-70'		
ļ }		8738 <del>4</del>	516	<b>_</b>	70'-80'		
20	R78 02566	87385	670	(686)	80'-90'		
	R78 02567	87386	314	•	90'-100'		
30	<del></del>	<del>- 87387</del>		·	100,-110,		<del>-,</del>
10	R78 02569	87388	98		110'-120'		
33	R78, <b>0</b> 2570	87389	144		120'-130'		
i j		<del>-87390 -</del>	tis	<u> </u>	130'-140'		<del></del>
34	R78 02572	87391	128		140'-150'		
35 36	R78 02573	87392	161		150'-160'	REG 78-2	
i i	<del>R78 02574 -</del>	<del>87393</del>	266		160'-170'	OVERBURDEN	
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		02575 02 <b>57</b> 6	87394 87 <b>3</b> 95		559 200		170'-180' 180'-190'		
		<del>02577</del>	<u> </u>		00		190'-200'		
		02578 02579	87397 87398		550	(506)	200'-210'		
		02580	67375 87377		536 170	(326)	210'-220'		
		02581	87400 ·		62		220'-230' 230'-240'	•	
		02582	87401		10		240'-250'		
		02563	<del>27402</del>		<del>94</del> -		250'-260'		
	<b>R</b> 78	02584	87403	i	13		260'-270'		
		02585	87404		<b>780</b>		270'-280'	•	
		-02586	<del>87405</del>		25-		280 = 290		
		02587	87406		200		290'-300'	END	
		02588	87407		880		5'-20'		
		<del>-02589 -</del>	<del>87408</del>		715 110	(500)	20'-30'		
		02590 02591	87409 87440		10	(520)	30'-40'		
		02591 <del>02592</del>	87410 <del>87411</del>		86 60		40'-50'		
		02593	87412		130		50'-60' 60'-70'		•
		02594	87413		112		70'-80'		
		02575	<del>87414</del>		SAŬ		80'-90'		
		02596	87415		330		90'-100'	REG 78-3	
		02597	87416		575	•	100'-110'	OVERBURDEN	
		<del>-02598-</del>	87417	- · <del>- · · · · · · · · · · · · · · · · ·</del>	337	(505)	710'-120'	0-5'	
		02599	87418		157		120'-130'		
		02600	87419		373		130'-140'		_
		02601	<del>- 57420 -</del>		រចិ <del>ប</del> ិ		140'-150'		.,
		02602 02603	87421 87422		980		150'-160'		•
		<del>02604</del>	<del>87423</del>		35 886-		160'-170'	· · · · · · · · · · · · · · · · · · ·	
		02605	87424		324		170'-180' 180'-190'		
		02606	87425		247		190'-200'	END	
		<del>02607</del>	<del>57426</del>		 520		5'-20'	LIIU	
		02608	87427		290		20'-30'		
		02609	87428		780		30'-40'		
<del></del> -		<del>02610</del>	87429		45	(680)	40'-50'		
		02611	87430		3 <b>4</b> 0	(840)	50'-60'		
		02612	87431		500	- •	60'-70'	REG 78-4	
		<del>02613</del>	<del>- 87432</del>		146		70,-80,	OVERBURDEN	
		02614 02615	87433 87474		165		80'-90'	0-5'	
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			"	SAMPLE)			
	R78 02616	87435	560		100'-110'		
	R78 02617	87436	710		110'-120'		
7	- <del>878 02616</del>	37437	870		120'-130'		
•	R78 02519	87438	1470		130'-140'		
31	R78 <b>02</b> 620	87439	1520		140'-150'		
Ţ	~~ R78:02621 ~	87440	06 <u>8</u>		750 <b>'-</b> 160'		
٦	R78 <b>02</b> 622	87441	710		160'-170'	·	
1	R78 02623	87442	. 2290		170'-180'		
<u>"</u>	<del> R78 <b>0</b>2624</del>	87443	1570		<del>-180'-190'-</del>		
	R78 02625	87444	670		190'-200'	END	
3	R78 02626	87445	316		25'-40'	<del></del>	
,	F78 02627	87446	307		40'-50'		
	R78 02628	87447	324		50'-60'		
٠[	R78 02629	87448	325		60'-70'		
<u>`</u>  -	<del>K78 02630</del>	87449	566	(560)	701-801	<del></del>	·
1	R78 02631	87450	1700		80'-90'		
1	R78 02632	87451	296		90'-100'		
١.		87452	<del>406</del>		100'-110'	REG 78-5	
١	R78 02634	87453	550		110'-120'	OVERBURDEN	-
"	R78 02635	87454	. 400		120'-130'	0-25'	
• -	<del>- R78 02655 -</del>	87435	450	<del></del>	130'-140'	······································	
?	R78 02637	87456	365		140'-150'		•
9	R78 02638	87457	510		150'-160'		
•	<del>—                                    </del>	<del>-87453 -</del>	<del></del>	<del></del>	-160'=170'-		<del></del>
2	R78 02640	87459	296	(318)	170'-180'		
3	R78 02641	87460	222	(5,5)	180'-190'		
۱	R78 02642	87461	<del>327</del>		190'-200'	END	
5	R78 02643	87462	218	(209)	14'-30'		t.
	R78 02644	87463	500	(200)	30'-40'	2	
'ŀ		87464	64 <del>ን</del> -		40'-50'		
١,	R78 02646	87465	1440		50'-60'		
۰	R78 02647	87466	41000	(37600)	60'-70'		
L	R70 02646	87467	1670-	(0,000)	<del>701-801</del>		
١	R78 02649	87468	1170		80'-90'		
1	R78 02650	87469	760	•	90'-100'		
۱,		<del>87470</del>	335		-100,-110,		
4	R78 02652	87471	200		110'-120'		
١,	R78 02653	87472	377		120'-130'		
١	<del>R78 02654</del>	<del>- 07473 -</del>	<del></del>		130'-140'	REG 78-6	
7	R78 02655	87474	193		140'-150'	OVERBURDEN	
3	R78 02656	87475	254		150'-160'	0-14'	
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			cu <sub>p</sub>	(CHECK SAMPLE)	F00TAGE	
1	R78 <b>0</b> 2657	87476	645		160'-170'	
۱۵/	R78 02658	87477	1120		170'-180'	
1	<del>- R78 <b>0</b>2659 -</del>	<del>- 67478</del>	460		180'-190'	· · · · · · · · · · · · · · · · · · ·
	R78 <b>02</b> 660	87479	490		190'-200'	
3	Ř78 <b>0</b> 2661	87480	426		200'-210'	
4	R7802662-	67461	248	(235)	210'-220'	
	R78 <b>0266</b> 3	87482	474	(200)	220'-230'	
	R78 02664	87483 -	266		230'-240'	END
,	<del>- R78 02665</del>	87484	1 27 27		74'-90'	
8	R78 <b>026</b> 66	87485	. 172	(168)	90'-100'	
,	R78 <b>0</b> 2667	87486	231	()	100'-110'	
10	R78 - <del>0</del> 2668	87487-	173		110'-120'	
	R78 <b>0</b> 2669	87488	138		120'-130'	
,,	R78 <b>02</b> 670	87489	159		130'-140'	
.3	<del>- 678 02671 -</del>	<del>87470</del>	116	(121)	140'-150'	
	R78 02672	87491	98	<b>X</b> -, <b>y</b>	150'-160'	
15	R78 <b>0</b> 2673	87492 .	87		160'-170'	REG 78-7
	—R78—02 <del>67</del> 4—	87493	87		T70"=180"	OVERBURDEN
,,	R78 02675	87494	102		180'-190'	0-74'
8	R78 02676	87495	114		190'-200'	
•	<del>R78 02477</del>	87456	74		200'-210'	
	R <b>78 0</b> 2678	87497	128		210'-220'	
,,	R78 02679	87498	118	(117)	220'-230'	
,,	R7802680	<del>87479</del> -	132		230'-240'	<u>-</u>
13	R78 02681	87500	1.23		240'-250'	
4	R78 02682	87501	100		250'-260'	
	<del>- R78 02683 -</del>	<del>87502</del>	103	(100)	260*-270*	END

REG PROPERTY

RU BRUASIT

E.R.LAB JÕB NG. 1398

ROCK SERIES  AGPPM AU PPB HUPPM PERCUSSIO	IN HOLF NO
	M MOLL HOL
R78 02702 R78 2540-48 <.4 <10 2 REG 78	
070 03707 E76 3550_E8 < 4 <10 3 REG 78	
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R78 02705 R78 2588-2606 4 4 10 6 REG 78 RFG 78	
R/8 02/06 R/8 260/-2625 3.4 10 DEC 78	
R/8 02/0/ R/8 2020-2042 N.4 NIV 6 REG 78	- 6
R78 02709 R78 2648-2664 < 4 <10 25 REG 78	
R78 02710 R78 2665-2683 <.4 130 <2 REG 78	- 7

Consult attached General Testing Laboratory's Certificate of Assays No. 7806-0850 dated June 9, 1978 for further check samples.

# **GENERAL TESTING LABORATORIES**

DIVISION SUPERINTENDENCE COMPANY (CANADA) LTD





TO: CONTINCO EXPLORATION RESEARCH LAB. 1486 Bast Pender Street Vancouver. B.C.

CERTIFICATE OF ASSAY

No.: 7806-0350

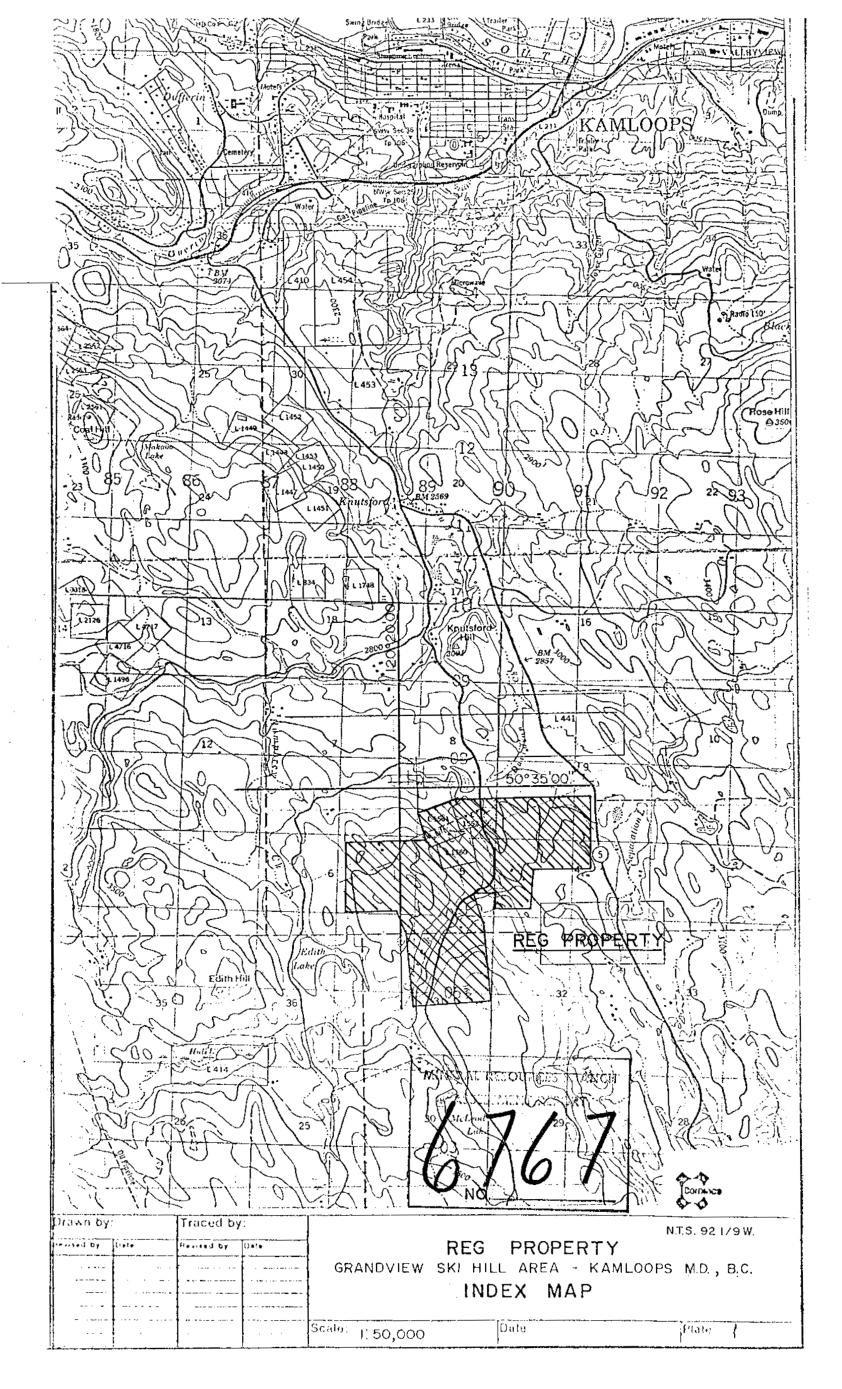
DATE: June 9/78

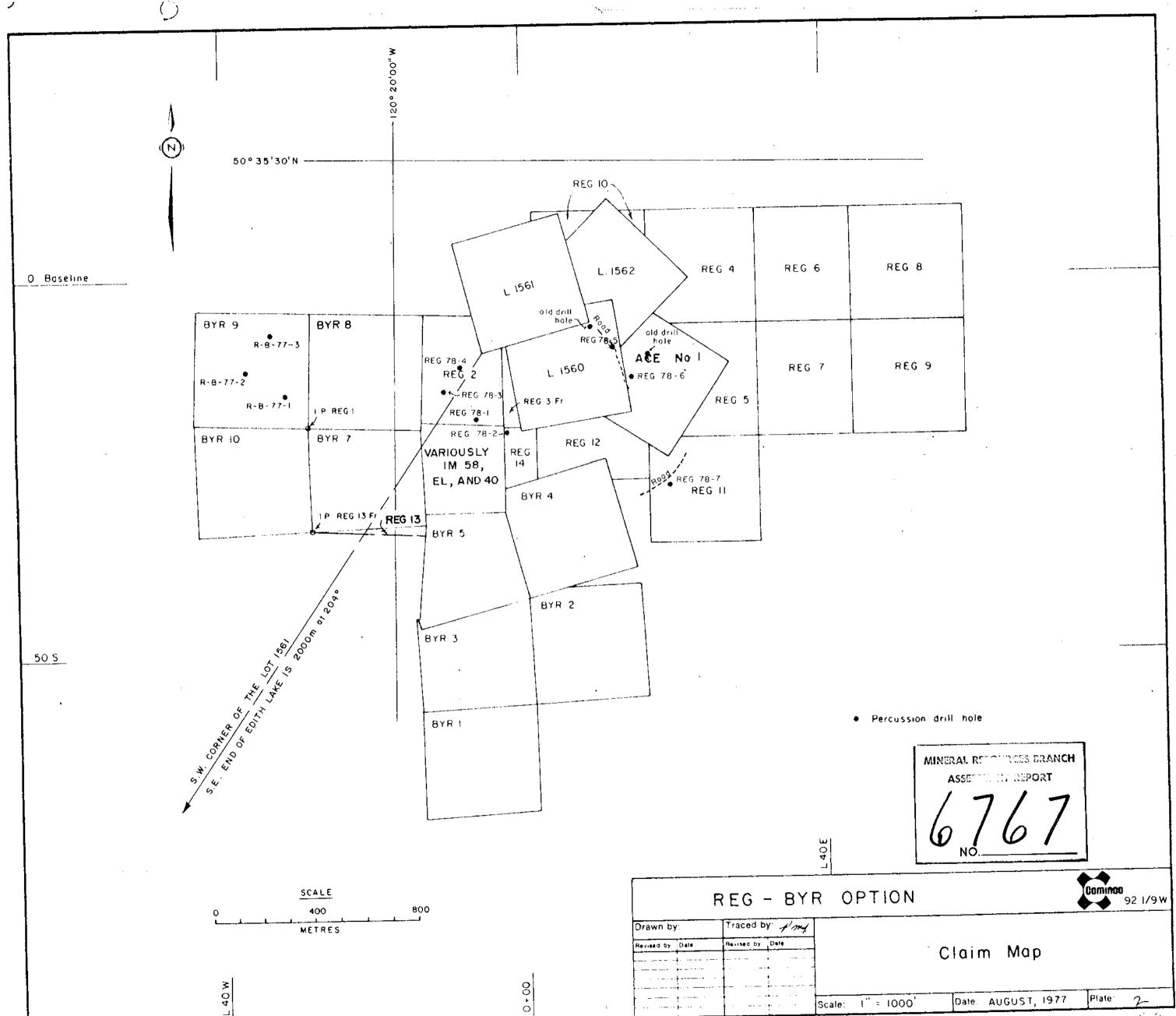
We berely certify that the following are the results of assays on:

Pulp

	300133	- CONTRACTOR	Copper	XXX	XXX	33338	2332	2000
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