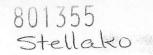
TEL.: BUS. 682-4144 RES.: 987-9520

WILLIAM M. SHARP, P. ENG. CONSULTING GEOLOGICAL ENGINEER



STE. BOB, 900 WEST HASTINGS ST. VANCOUVER 1, B. C. February 7th , 1967

Mr. J. R. Trepanier, Managing Director, Stellako Mining Co. Ltd., 716 – 602 West Hastings Street, Vancouver 2, B.C.

Dear Mr. Trepanier:

Re: Check Determinations for Total Copper, Roscoe Lake, Geochemical Exploration

Preliminary

Check determinations for p.p.m. total Cu were performed on 144 soil samples selected by the writer. This was carried out at Bio Metals' laboratory on samples previously run by them during the course of the recent general geochemical exploration program. A similar analytical procedure - Cu extraction by hot acid and quantitative determination of the vapourized metal solution by absorption spectrometer - was followed on these checks.

Apparent discrepancies in laboratory results were noticed most frequently during Bio Metals initial period of operations; these could be attributed to frequent changes in laboratory personnel and, possibly, to a general preliminary unfamiliarity with the highly-sensitive equipment (and procedures) newly acquired by them. During the latter weeks, with the laboratory work apparently being much more closely controlled, results from line-to-line appeared to be much more consistent and logical.

For the above reasons, the writer has selected most of the eheck samples from the earlier-run south-central part of the over-all grid. Fortunately, the general series of soil samples and results derived from, and delineating the principally-anomalous areas in the north half of the grid appear to be satisfactorily consistent and representative.

Discussion of Results

A copy of Bio Metals' results of their check-determinations accompanies this report. For consistency, comparisons of check, and original determinations follow the order of their report, rather than the sequence of grid lines on the geochemical map. On the basis that consecutive increments of soil, both taken from the same general soil sample submitted, may be expected to differ to same degree in total metal content, comparisons of original, and check determinations are made on complete lines or sequences. The accompanying sheet shows computed averages of sequences of check, and original determinations.

Sample Sequence	(a) Average of re-runs p.p.m.	(b)	Difference	% Change
445, 1-30W	37.2	26.7	+10.5	+39.2
405, 8-16W	24.8	24.2	+ 0.6	+ 2.5
525, 1-10W	26.0	18.8	+ 7.2	+38.2
685, 1-12W	21.5	15.6	+ 5.9	+38.0
56N, 21-26W	41.8	43.5	- 1.7	- 4.0
65, 6-14W	40.7	24 .3	+16.4	+67.8 *
345, 6-16W	26.7	31.3	- 4.6	-14.8
265, 5-16W	44.1	45.5	- 1.4	- 3.0
145, 6-12W	31.6	32.4	- 0.8	- 2.5
225, 6-16W	26.4	31.7	- 5.3	-16.7
305, 6-16W	25.5	22.6	+ 2.9	+12.8
22N, 4-20W	59.4	51.9	+ 7.5	+14.3
685, 1-14E	43.6	30.2	+13.4	+44.5
	Net average	change		+16.6%

Conclusions:

The indicated 16.6% higher average results obtained by re-running of the selected sample groups would, in the writer's opinion, constitute a logical minimum increment to be added to all of the original Cu determinations from the initial sampling conducted within the southerly section of the Roscoe Lake grid. This might

exclude more recent determinations from subsequent fill-in sampling, by reason of the apparent improvement in the accuracy of the laboratory work with experience and personnel changes.

Most importantly, the higher average Cu concentrations obtained indicate that the currently-indicated anomalous areas represent conservative delineations of areal extent and copper content.

With regard to the presence of additional un-checked lines with apparently subnormal copper values, a visual approximation of average p.p.m. Cu within these sequences, with appropriate upward adjustments (+1/6 to + 1/3) seems to rule out the possibility that significant anomalies have been missed.

If further checking is considered, the preliminary Noranda determinations within the 0-30W, 64N-24S section on lines at 400' N-S intervals would have to be included – the main basis for this being that Noranda – Bio Metals analytical methods are quite different, and that Noranda's determinations are generally stated only to the nearest 25 p.p.m. Cu. Subsequent determinations on samples from intermediate, or fill-in lines emphasize these differences.

For the present, the scope of soil-sampling and Cu determinations appears adequate. However, some information concerning MoS₂ distribution, as related to that of Cu, would be desirable in the principal anomalous section of the grid. In the event that the property is optioned by another exploration group, the analytical checks for MoS₂ should be one of their obligations.

The writer suggests that all soil samples at the Bio Metals laboratory be picked up and safely stored for future reference.

Respectfully submitted,

W.M. Sharp, P.Eng.

WMS/jm

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4											1454	mpl
GE	0-CH	EMICAL	_ A		AL	YSI	S	RE	PO	RT		
PROJE	ECT. Stell	laco - Ros	scoe		REP	PORT	NO:			SHEET: /		
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29	29	2260	10	t -		6	1			(a)		B
30	306	A 2261	(a) 5	0	161	25-	Avo	9.1-	Pow;	37.2	No. Y	26.

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DATE	Jan .:	Rer	un	AP	APPROVED: E. Tryberg							
	SAMPLE	REF.		,	7 ,	rs+	1	-		ж))
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2	15	6891		8	V	50			1			
3	14	6892		4	V	3						1 Sale
4	13	no sa	aup	le	1						`	
5	12	6893		20	~	22						
6	11	6894		25	0	25						1.1.1
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8	9	6896		40		66	4.			(a)		61
9	86	5 6897	(a)	30	V (b)	42	AVG	8-1	aw:	24.8	12)=	24.2
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27	8	6839		32	V	16			1			
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	SAMPLE	REF.	a	e	Ŧi	St Cun		•				
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9	166	2042		48	1	41/	Arm		-16W			45.5
10	145 - 6 W	2027	V	26	1	28	1					
11	7	2028	1	30	1	26						
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16	1260	2086	V	46	/	41/	A	1.10-	12w	31.6		32.4
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19	8	1956		52		55		S. L.S.				
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26	15	1963		12		18	1.			(a)		Ch!
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DATE :	DATE: Jan. 30/1967 Perun						APPROVED E. Frybarg								
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1	305-96	1928		34	. V	20									
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the second se	22N 4W	A 7857	V	116		101				all and a second					
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14	14	2877	V	64		82					1				
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18	18	2881	V	35		31	5			713		623.			
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25	5	7074		60	V,	41									
26	6	7075		35.	V	25						1			
27	7	7076		75	. V	48					1	1			
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29	9	7078		16	V,	16									
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