103 I/7

# 671626

July 23rd, 1973.

Mr. W. McRae, Director, Cree Lake Mining Ltd., 4820 Walsh St., Terrace, B.C.

3003- 505 Ath AVE. S. W., CALGARY T2POJ8

Dear Sir:

JOHN A. TESSARI

I have examined the Bullis report and various other data loaned me relevant to the holdings of Cree Lake Mining Ltd. on <u>Nash Ridge</u>, about 8 miles southwest of Terrace. On July 19th, as you know, I spent several hours on the property with Ken Mayner who is presently diamond drilling on the north end of the "Main Mineralized Zone". Later, Mayner and I examined the core from 4 current drill holes that is stored at his home in Terrace.

At the risk of sounding arrogant, I am something of an authority on skarn deposits, particularly those in the coastal region of B.C. (The Cree Lake deposits are typical skarn deposits)

Concerning B.C. coastal skarn deposits in general, I wish to make the following observations:

 Skarn, featuring garnet, or epidote, or both is quite common in the Coast Mountains.

 Skarn most commonly occurs where greenstone, limestone and 'granite' occur in juxtaposition.

 Skarn was generally considered to be an alteration product of limestone until, in 1952, I published a paper indicating that, whereas limestone is an essential constituent of the environment, the skarn is generally developed in the volcanics or altered volcanics (greenstone).

4. The principal minerals found in these skarn deposits are iron, copper and sometimes zinc. Only the iron and copper have been mined economically in the coastal area.

5. Skarn deposits are generally irregular and the size of the surface outcrop cannot be depended upon to give a reliable indication of the size of the deposit. Close drilling is imperative.

6. The mineralization in skarn deposits varies markedly from place to place in a single outcrop, making an overall evaluation difficult.

All the above observations "fit" the Cree Lake deposits at Terrace. With regard to the Cree mineralization, molybdenite also occurs in significant amounts, along with the magnetite, pyrite, chalcopyrite and "black jack" (sphalerite). The dominant skarn mineral is brown garnet.

Drilling to date has been confined to the "Main Mineralized Zone" on the Lady Luck claims. Cree Lake drilled 11 short holes here in 1966-67 and Nittetsu, in 1970, drilled six holes for a total of 3000 feet. Now the "Main Mineralized Zone" is being further tested by Ken Mayner with a series of vertical diamond drill holes.

- 2 -

#### CONCLUSIONS

As of now, it would <u>appear</u> that the "Main Mineralized Zone" has been appropriately named and that work on other parts of the large property, particularly by the Japanese, has not found skarn outcrops as promising as those that constitute the "Main Mineralized Zone". In other words, attention has been confined to the No. 1 area where the drilling has been done.

With regard to this particular zone, it consists of a north "lobe" and a south "lobe" between which there is 1200 ft. where the skarn zone is relatively narrow. Mayner is now probing the north lobe and his intention is to probe the south lobe subsequently.

#### RECOMMENDATIONS

In spite of the fact that the present drilling program represents a third "whack" at the same targets, it is being carried out intelligently and a modest program of the type in progress is not unjustified.

A dozen vertical holes, average length 150 feet, is recommended for <u>EACH</u> lobe, making in all a total footage of, say, 3600 feet. Thus far, Mr. Mayner has selected the holes with care and I suggest that the "Main Mineralized Zone" can be evaluated once and for all by the present program. To this end, I suggest that I visit the property every 3 weeks during the present drill program to examine and log the core produced - and to confer with Mr. Mayner. It will be essential, of course, to develop zones elsewhere on the property and, with regard to the remainder of the property, I do not have the basic information to discuss its potential. I think it would be worthwhile for me to spend 2 or 3 days with Mr. Mayner, possibly in the early fall, during which time he could show me the other outcrops of mineralized skarn with which he is familiar.

> Respectfully submitted, BACON & CROWHURST LTD.

W.R. Bacon, Ph.D. P.Eng.

WRB/1c

4 ......

8 ... 3

Logged by W.R.B.

8*	40	01	Greenstone
0*	*	23*	Garnet skarn 5" good copper @ 17" Mo @ 18.5" Mo @ 22.0"
23*	-	34.51	Massive andesite
34.5"	-	59.51	Brown garnet skarn
59.5*	-	61.5"	Massive grey andesite
61.5"		72.5	Brown garnet skarn
72.5	-	75.0"	Massive grey andesite
75.0"		84.5"	Brown garnet skarn
84.5*	69	88.51	Massive grey andesite
88.51	-	91.0%	Brown garnet skarn
91.0*	8	99.0"	Massive porphyritic andesite
99.0*	60	109.0*	Badly broken, mainly brown skarn
109.0*	-	112.51	Massive grey andesite
112.5*	-	122.5*	Brown skarn, sheared greenstone Mo veinlet @ 114.8'
122.5		125.6*	Tremolite-garnet rock

(N.B. Not all the core present)

. . .

36

$$\begin{array}{c} 0.0^{\circ} - 15.0^{\circ} & \text{Well mineralized (mainly Cu) skarn} \\ 15' MINSERN \\ 0.65% \\ 0.65\% \\ 0.60\% \\ 0.65\% \\ 0.60\% \\ 0.60\% \\ 0.65\% \\ 0.60$$

.

18.

0.	615	15.0"	Skarn
15.0'		88.0*	Grey limestone (Fine Zn ?). Some development of epidote, minor garnet
88.01	-	120.0*	Andesite, mainly medium-grained
120.0"	<b>a</b> / <b>s</b>	155.0"	Broken, sheared to 134.7%. A leucocratic granite. Some Py.

### Logged by W.R.B.

0.01	-	16.0"	Leucocratic granite. Some mineral lost. Fe, Zn, Cu in last 3'.
16.0*		29.0*	Mixture - skarn, greenstone, minor granite. Fe (magnetite) in patches
29.0*	59	43.0*	Mixture - fine grained andesite, epidote skarn
43.0"	-	76.5*	Dark, massive, medium-grained andesite.

Hole continuing @ 90\*

1 Beach

+

6.8 3

0.0" - 16.0"	Leucocratic granite. Fe, Zn, Cu in last 3'.	Some minera	1 lost.
16.0" - 29.0"	Mixture - skarn, green Fe (magnetite) in patc	stone, mino hes.	r granite.
29.00 - 43.00	Mixture - fine-grained	andesite,	epidote skarn.
43.0' - 181.0'	Dark massive, medium-g fine pyrite.	rained ande	site;
Samples:		Cu	MoS2
10228 10229	98° - 108° (10°) 152° - 157° (5°)	0.03	0.004 0.003
181.0" - 183.6"	White limestone.		
183.6" - 188.5"	Fine-grained andesite.		
188.5° - 212.0°	Limestone becoming les	is pure towa	rd lower contact
212.0" - 228.0"	Greenstone, minor skar chalcopyrite.	m, fine mol	y, pyrite,
Sample:		Cu	MoS2
10230	2121 - 2191 (71)	0.19	0.336

0.0	-	55.00	Badly broken rock; mainly andesite, minor skarn. Short sections of granite. Some fine pyrite; chalcopyrite (?) @ 36' - 37'.
55.0"		67.00	Unmineralized greenstone.
67.0"	•	96.0	Leucocratic granite.
96.0"		107.0"	Greenstone, quite broken.

0.01 - 29.01	Mixed skarn, limestone. M No mineral.	inor di	orite.
29.0* - 55.0*	Grey limestone.		
55.0° - 83.0°	Dark, unmineralized andesi	te.	
83.0" - 145.0"	Typical light skarn (after A few specks of moly.	greens	tone).
Sample:		<u>Cu</u>	Zn
10232	83" - 93" (10")	0.01	0,01

1. 1

.

70 -

96"

### Logged by W.R.B.

andesite dykes. 96° - 115° As above plus light development of skarn. 107.5° - 108.8° Bornite in white limestone. 115° - 135° Medium-grained diorite. 135° - 182° White limestone - a few dark dykes. 182° - 187° Porphyritic granite plus minor skarn.

White limestone cut by several dark, narrow,

0.0"	7.5"	Leucocratic granite.
7.5" -	10.0"	Andesite dyke.
10.0"	14.8*	Leucocratic granite.
14.8" -	21.8*	Andesite dyke.
21.8"	38.7°	Mainly diorite; quartz stringers plus moly at 27°, 28°.
38.7" -	48.5*	Andesite dyke.
48.5"	75.8"	Dark medium-grained diorite, some quartz veining.
		55° - 56° Moly.
75.8	93.1*	Andesite dyke.
93.1" -	111.30	Dark, medium-grained diorite.
111.3" -	144.7"	Skarn, mainly epidote. Minor moly, chalcopyrite.
San	ple:	<u>Cu</u> <u>Mo</u> (?)
	10233	112' - 118' (6') 0.06 0.049
144.78 -	148.0"	Andesite dyke.
148.0" -	184,0*	Skarn. Mineralized with pyrite, chalcopyrite, magnetite, moly.
San	ples:	<u>Cu</u> <u>Mo</u> (?)
	10234 10235 10236	148° - 156° (8°) 0.80 0.009   156° - 164° (8°) 0.32 0.011   164° - 174° (10°) 0.05 0.016

Logged by W.R.B.

0.08 - 50.09	Mottled, garnet-epidote skarn. A little fine pyrite; very sparse chalcopyrite.
Samples marked:	$14^{\circ} - 18^{\circ}$ $23^{\circ} - 28^{\circ}$ $\times 36^{\circ} - 40.5^{\circ}$ $40.5^{\circ} - 45.0^{\circ}$ $45.0^{\circ} - 49.0^{\circ} \times$
50.0" - 52.3"	Basalt dyke.
52.3" - 92.5"	As at 0.0' - 50.0'. Magnetite at 57'-58', 82.9' - 84'.
92.5" - 96.0"	Basalt dyke.
Samples marked:	×105" - 110". 110" - 115". ×

DRILLING TO PROCEED

October 23rd, 1973.

Mr. John A. Tessari, President, Cree Lake Mining Ltd., 3003 - London House, 505 - 4th Ave. S.W., Calgary, Alta. T2P 0J8

Dear John:

This note is partly to tell you how much I enjoyed our outing at Terrace and the opportunity to discuss future plans for your large property.

One minor tragedy - my knapsack was mislaid by C.P.A. on my return and hence my carefully selected quartz sample is also gone.

I am enclosing my logs for the drill core we examined. I have now had time to re-think my opinion concerning further work on the main skarn zone and I am more positive than ever, if possible, that Cree Lake should do no further work. Rather, the company should attempt to interest a major company.

I also enclose our invoice and thank you, once again, for the opportunity to be of service to Cree Lake.

Yours very truly, BACON & CROWHURST LID.

W.R. Bacon

WRB/ic Encl's.

November 5, 1973

Mr. John A. Tessari, President, Cree Lake Mining Ltd., 3003 - London House, 505 - 4th Ave. S.W., Calgary, Alta. T2P 0J8

Dear John:

Further to my letter of October 23rd, my knapsack and quartz sample turned up five days late in the Vancouver Airport. I had the sample assayed for silver and gold and enclose the Certificate of Assay. As you will note the quartz is barren which is what I suspected.

With kindest personal regards.

Sincerely,

BACON & CROWHURST LTD.

WRB: bmc Encs. 2 W. R. Bacon



ATTN:

CHEMEX LABS LTD.

212 BROOKSBANK AVE. NORTH VANCOUVER, B.C. CANADA TELEPHONE: 985-0648 AREA CODE; 604

ANALYTICAL CHEMISTS

V

GEOCHEMISTS

• REGISTERED ASSAYERS

# CERTIFICATE OF ASSAY

TO: Bacon & Crowhurst Ltd., Ste. 1720 - 1055 W. Hastings St., Vancouver 1, B. C.

CERTIFICATE NO.		22739	
INVOICE NO.		10812	
RECEIVED	Oct.	26/73	
ANALYSED	Oct.	31/73	

48903 < 0.01 < 0.003	SAMPLE NO. :	Oz/Ton Silver	Oz/Ton Gold		
	48903	< 0.01	< 0.003		
				л., стород страна с Л. страна стран	
			-		
			· · · · · · · · · · · · · · · · · · ·		
	1. a 				
		an en esta St		· · · · · · · · · · · · · · · · · · ·	
$\cap$	Ŕ			$2D_{\tau}$	

Ťo:	CREE LAK	E MINING LTD.
	2608, 50	5-4th Ave. S.W.,
	CALGARY,	Alta.



File	No.	6552	
Date		June 20,	
Sam	ples	Core	

.ATTENTION: Mr. John Tessari

LORING LABORATORIES LTD.

SAMPLE No.	OZ./TON GOLD	OZ./TON SILVER	% Cu	% Zn	% MoS2				
CORE - DDH #2									
1-5*	.010	.40	.95	.10	.007				
5-10'	.010	•32	57	•13	.010				
10-15-20'	.010	•22	.44	•07	.007				
33-40" (Sludge)	.010	.26	.17	1.40	.007				
		•							
		•							
			;						
		•							
	I Thereby assays made by	J Thereby Clertify that the above results are those assays made by me upon the herein described samples							

**Rejects Retained one month.** 

Pulps Retained one month unless specific arrangements made in advance.

ex me foace

Licensed Assayer of British Columbia

TO: CREE 3 KE MINING LTD. 2609 205-4t} CALCARY, Alta.				HTD.	File No. Date Samples .	6576 June 26, 1973 Core	
	Mr	Lor	Sorth LING LA	ASSAY &	es Ltd.	RECEIVED JUN 27 1973	
	AMPLE No.		% Cu	% 211	% Mo52		
	<u>CORES</u>	115-120	.55	.39	.006		
8!	10202	120-128	1.73	3.21	.003		
12'	10203	160-172	.97	•46	.004		
		J ASS	Hereby ( AYS MADE BY M	Lertify that the as Me upon the herein d	BOVE RESULTS ARE	тноsе S	

Pulps Retained she month unlest specific arrangements made in advances

CL me baac Licenses design of British Columbia