

May 12, 1975

TO: D.W. Coates, President  
Rest Creek Gold Mines Ltd.,

FROM: J. S. Vincent, P.Eng.

Re: Addendum to January, 1974 Report - Dump Sampling;  
Laboratory Tests; Up-dated Recommendations

During the summer of 1974 nine samples were selected from the major dump area at the Erie mine and analysed for gold. The objective was to try and determine which rock types were barren and which deserved processing. Towards this end distinctive material was selected representative of the rock encountered underground. Surprisingly, all varieties sampled contain gold, and only one reported less than 0.10 ounces per ton. The results are tabulated as follows: -

Sample 1.	0.04 ounces/ton; Mixed Argillite wall rock and aplite sill;
Sample 2.	0.10 ounces/ton; Finely divided graphitic and schistose argillaceous rock;
Sample 3.	0.36 ounces/ton; Mixed argillaceous wall rock and sill with quartz stringers;
Sample 4.	0.15 ounces/ton; Similar to Sample 3;
Sample 5.	0.38 ounces/ton; Aplitic and argillaceous material adjacent to an old sample shaft;
Sample 6.	0.96 ounces/ton; Similar material to Sample 5 with more visible quartz veining;
Sample 7.	0.12 ounces/ton; Argillaceous wall rock and aplitic sill rock laced with quartz stringers;
Sample 8.	0.40 ounces/ton; Both samples were taken from a pile set
Sample 9.	aside for shipment to the Trail smelter.

The rock which has been sampled represents mine rock excavated while drifting and raising to reach the high-grade pods mined during the latter periods of operation. This work was done in the plane of the vein, and I believe that the sample results on the dump indicate that the argillaceous wall rock, and possibly the aplite sill, carry an appreciable amount of gold. The actual vein pinches and swells but the adjacent wall rocks are fractured and laced with quartz stringers

which possibly carry the values. Further sampling underground and on surface is warranted to evaluate this potential.

A literature review of several other gold-producing areas has been carried on this past winter in conjunction with our general gold study, and particular geologic relationships have become apparent which may be present on the Keystone Mountain Property. Where sedimentary and volcanic rocks are present and act as the host for gold bearing veins, there is often a close association with carbonaceous-rich stratigraphic members which have a "sponge effect" and carry appreciable values. This relationship has only recently become significant as the mining of low grade gold deposits has become a reality. On the Erie Property there is a bed of argillaceous rock adjacent to the ore zone which is both schistose and highly carbonaceous, and which contains low gold values. The values increase as the number of quartz stringers increase. A sample of this material from the surface dump assayed 0.10 ounces of gold per ton. The potential of this low grade mineralization warrants evaluation.

Twenty large samples of dump rock and underground material totalling about 1,000 pounds were collected last fall by Mr. C.M. Armstrong, P.Eng., as outlined in his memo of October 14, 1974, and delivered to Mr. Rod Blundell of Kamloops Research and Assay. Analytical and metallurgical tests were carried out on high grade underground vein material and adjacent low grade wall rock to evaluate concentration by a sink-float technique. The results indicate that a worthwhile upgrading can be achieved on such material, and Mr. Blundell who has had a great deal of experience in the installation and operation of heavy media plants believes that similar results can be obtained on the lower grade surface dump material. The test

results are presented on the attached Certificate of Assay.

Proposed Program and Cost Estimate:

1.	The immediate property costs:	
(a)	Option payment, 1975 (D.W. Coates to be reimbursed)	\$ 10,000.00
(b)	Mineral Land Tax @ \$.25 acre	167.35
(c)	Property tax (J.S.Vincent to be reimbursed)	118.69
(d)	Water License rental (J.S. Vincent to be reimbursed)	<u>100.00</u>
		\$ 10,386.04

The revised recommended program should be undertaken in stages contingent on financing and results. Two specific phases are outlined which can proceed concurrently as weather conditions allow.

PHASE I.

Evaluation and exploration is recommended as outlined:

(a)	Preliminary: Lines at 800 foot intervals; allowing for five weeks.	
1.	Line cutting, 15 miles @ \$150.	\$ 2,250.00
2.	Soil sampling: 100 feet samples Az, Pb, Zn., 15 miles @ \$200.	3,000.00
3.	VLF-EM, 50 foot readings 15 miles @ \$70.	1,050.00
4.	Geological mapping 1" = 200'	1,875.00
5.	Underground sampling of host rocks and selective geological mapping	8,000.00
6.	Transportation, supervision data, compilation and administration	<u>3,000.00</u>
	SUBTOTAL	\$ 19,175.00
(b)	Detailing: Lines at 100 - 200 foot intervals; allow three weeks.	
1.	Line cutting, soil sampling, VLF-EM, estimate 9 miles at \$800. per mile	\$ 7,200.00
2.	Bulldozer trenching of anomalous zones, sampling and assaying	<u>2,500.00</u>
	SUBTOTAL	\$ 9,700.00

(c) Diamond Drilling:	
1. 3,500 feet of BQWL @ \$12. foot	\$ 42,000.00
2. Mob, demob, logging and assaying, transportation and administration	15,000.00
(d) Metallurgical testing and assaying	<u>1,000.00</u>
TOTAL estimated exploration	\$ 97,261.04

PHASE II.

Contingent on the favourable metallurgical results on the dump rock, processing can begin as the milling equipment is ready. The estimated cost breakdown for this phase is outlined as follows:

1. A preliminary cost has been estimated as closely as possible to acquire the milling plant, transport it to Kamloops, purchase the necessary additional equipment and put it in running order. A total of \$40,000. is allocated to this requirement.
2. An amount of \$20,000 will be required to run-in and operate the plant for an initial period.

TOTAL PHASE II Estimate	\$ 60,000.00
TOTAL COST ESTIMATE FOR BOTH PHASES	<u>\$ 157,261.04</u>

ALLOW \$155,000.00

Respectfully submitted,

John S. Vincent, P.Eng.

Kamloops Research  
&  
Assay Laboratory  
LTD.



R. G. Blundell  
Res. 573-3016

B.C. CERTIFIED ASSAYERS

WEST TRANS CANADA HIGHWAY - BOX 946 - KAMLOOPS, B.C. V2C 5N4  
PHONE 372-2784

January 20, 1975.

Mr. J. S. Vincent, P. Eng.,  
John S. Vincent Ltd.,  
1075 Melville St.,  
Vancouver, B. C.

Dear Jack:

I am enclosing the results of the sink-float test for your perusal before our discussions. I selected high grade material as I can only purchase the chemicals in small quantities and would have had to repeat the tests numerous times to obtain sufficient material in the sink to assay. This is not a particularly good test and subsequent ones we made on the Windpass and Homestake were much better, with almost nothing in the float. The grade of material reporting in the sink would approximate the enclosed results if we treated the low grade dump. The only difference would be that we would sink more of the middling floated in this test which would result in a slightly lower grade of sink concentrate. The ratio of sink to float would produce a much lower tonnage of sink and far more float material.

If you would like further work on a lower grade material for confirmation I will select this from the dump material on hand.

Yours sincerely,

KAMLOOPS RESEARCH &  
ASSAY LABORATORY LTD.

A handwritten signature in cursive script, appearing to read 'R. G. Blundell', written in dark ink.

R. G. Blundell.

RGB:d  
Encl.



# Kamloops Research & Assay Laboratory Ltd.

WEST TRANS CANADA HIGHWAY - BOX 946 - KAMLOOPS, B.C. V2C 5N4

B.C. LICENSED ASSAYERS  
GEOCHEMICAL ANALYSTS

## CERTIFICATE OF ASSAY

TO Mr. J. S. Vincent, P. Eng.,  
1075 Melville St.,  
Vancouver, B. C.

Certificate No. \_\_\_\_\_  
Date January 20, 1975.

I hereby certify that the following are the results of assays made by us upon the herein described \_\_\_\_\_ samples

<del>XXXX</del>	Marked		GOLD Ounces Per Ton	SILVER Ounces Per Ton	Pb Percent	Zn Percent	Cu Percent	Distribution				
	Wt. Grams	Distribution						Au Percent	Ag Percent	Pb Percent	Zn Percent	Cu Percent
Sink	44.1)	61.3	2.74	5.76	10.0	5.65	.22)	97.9	98.0	93.0	85.5	71.3
Midds	49.9)		1.36	3.44	4.58	4.45	.28)					
Float	59.2	38.7	.07	.15	.83	1.35	.16	2.1	2.0	7.0	14.5	28.7
Total	153.2	100.	1.178	2.84	4.68	3.60	.22					

**NOTE:**

Rejects retained three weeks  
Pulps retained three months  
unless otherwise arranged.

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Registered Assayer, Province of British Columbia