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ADDENDUM TO
GEOLOGICAL REPORT
ON THE
MACKTUSH PROPERTY
Alberni Inlet
Alberni Mining Division
Vancouver Island
British Columbia

Latitude 49°08' North
Longitude 124°52' West
NTS 92F/2W

FOR
SYMC RESOURCES LTD.

BY
N.C. CARTER, PH.D. P.ENG.
November 7, 1994

N.C. CARTER, Ph.D., P.Eng.
CONSULTING GEOLOGIST

Introduction

This addendum report has been prepared to respond to comments emanating from an initial review by the British Columbia Securities Commission of the writer's Geological Report on the MACKTUSH property dated January 17, 1994.

Location of Long Trench

This trench is indeed southwest of the Fred vein as indicated on Figure 6. A correction of the typographical error is contained in a revised page 16 of the original report which is appended.

Surface Sampling

Six of the seven samples listed on the table on page 18 were collected on behalf of SYMC Resources Ltd. by, or under the supervision of F.C. Loring, P.Eng. Mr. Loring advises that these samples may be regarded as representative chip samples across the widths indicated in the table.

These sample sites were examined in early 1990 by John Wilson, P.Geo., who confirmed the widths of the vein structure at the various localities. The writer also examined several of these exposures and collected a representative chip sample at site 5 (sample 20772 in table), the results of which are in general agreement with the previously collected samples.

Conclusions

My comment regarding "the need for detailed sampling to determine average grades" on page 23 is intended to emphasize the necessity for further sampling of the vein structures during the course of the recommended exploratory program. It is anticipated that proposed excavator trenching will further expose the known veins and detailed surface sampling will be undertaken as an integral part of the program. Diamond drilling will also provide information regarding continuity of grade and structure.

Respectfully submitted,

N.C. Carter, Ph.D. P.Eng.

CERTIFICATE

I, NICHOLAS C. CARTER, with residence and business address at 1410 Wende Road, Victoria, British Columbia, do hereby certify that:

1. I am a Consulting Geologist and have been registered with the Association of Professional Engineers and Geoscientists of British Columbia since 1966.
2. I am a graduate of the University of New Brunswick with B.Sc.(1960), Michigan Technological University with M.S.(1962) and the University of British Columbia with Ph.D.(1974).
3. I have practised my profession in eastern and western Canada and in parts of the United States for more than 25 years.
4. The foregoing is an addendum to a Geological Report on the MACKTUSH Property, Alberni mining Division, British Columbia, prepared for SYMC Resources Ltd. and dated January 17,1994.
5. I do not currently own, directly or indirectly, any interest in the mineral claims comprising the MACKTUSH property or any securities of SYMC Resources Ltd. nor do I expect to receive any such interest.
6. Permission is hereby granted to SYMC Resources Ltd. to use the foregoing addendum report on the MACKTUSH property in support of any documentation to be filed with the British Columbia Securities Commission.

Dated at Victoria, British Columbia, this 7th day of November,1994:

N.C. Carter, Ph.D. P.Eng.

**N.C. CARTER, Ph.D., P.Eng.
CONSULTING GEOLOGIST**

SUMMARY

SYMC Resources Ltd. owns the Macktush gold prospect which is situated west of Alberni Inlet some 12 km south of Port Alberni on Vancouver Island.

The seven Modified Grid (4-post) mineral claims comprising the property cover a northwest trending contact between Island intrusions granitic rocks and volcanic rocks of the late Triassic Karmutsen Formation. A number of gold-bearing quartz-sulphide veins, discovered marginal to this contact in the central property area, are normal to the regional northwest structural trend and strike northeasterly with moderate to steep dips to the southeast. The quartz veins contain pyrite, pyrrhotite and chalcopyrite and values in gold, silver and copper have been obtained from sampling to date.

Two principal vein strike directions are evident including east-northeast and north-northeast. The best known example of the former is the Fred vein which has been traced by trenching and limited drilling over a strike length of more than 200 metres. Surface sampling at five sites within 100 metres of vein strike length yielded gold grades ranging from 0.218 oz/ton over 0.76 metre to 0.952 oz/ton over 4.88 metres. Four inclined drill holes, which intersected the structure between 10 and 40 metres vertically below the

surface exposures, returned gold grades of between 0.006 and 1.290 oz/ton over core lengths of 1.58 and 3.81 metres respectively.

The Red vein, an example of a north-northeast trending structure, is poorly exposed over an apparent strike length of 300 metres. A grab sample collected near the known southwestern limits of the structure assayed 0.318 oz/ton gold; a chip sample over a 1.1 metre width in the same area returned 0.073 oz/ton.

Work on the Macktush property over the past several years, including surface sampling, excavator trenching and limited diamond drilling, has identified locally good gold values over reasonable vein widths plus apparent continuity of the vein structures over significant strike lengths. Additional exploratory work is warranted to test the potential of the two principal vein structures and other possible zones.

It is recommended that an initial program consisting of base map preparation, orientation geophysics and geochemistry, detailed geological mapping, and additional excavator trenching and diamond drilling be undertaken at an estimated cost of \$253,350.00. A second phase program, including additional diamond drilling, would be predicated on the results obtained from first phase work.

excess of 200 metres.

The north-northeast trending structure containing the Red Vein (Figure 6) apparently extends several hundred metres down a draw of similar trend based on recent excavator trenching. Other exposures of quartz veins near the known southwestern limits of the Red vein may represent parts of parallel zones. The quartz veining in the long trench southwest of the Fred vein is considered to be another example of the north-northeast trending vein set.

Surface Sampling

A number of surface samples have been collected from various exposures by principals of SYMC Resources Ltd., Provincial Government geologists and the writer. Note that all of the SYMC samples shown on Figure 6 are grabs, or more properly, character samples of vein material. Sample number 20773 - 20775 refer to samples collected by the writer in June of 1990. Locations are shown on Figures 6 and 7 and analytical data are contained in Appendix I. Results for sites indicated on Figure 6 are as follows:

<u>Site</u>	<u>Number</u>	<u>Width(m)</u>	<u>Gold(oz/ton)</u>	<u>Silver(oz/ton)</u>	<u>Copper(%)</u>
1	130	Grab	0.318	0.31	0.42
	20773	1.1	0.073	0.20(ppm)	88(ppm)
2	20774	1.0	696(ppb)	0.30(ppm)	37(ppm)
3	E19511	Grab	0.192	1.56	0.57
4	E19510	Grab	0.166	1.23	0.42
5	E19509	Grab	0.074	0.76	1.12
	20775	Chips	817(ppb)	1.40(ppm)	26(ppm)

plus analytical data for the other three holes as provided by SYMC Resources Ltd. are contained in Appendix II.

Because of some uncertainties in establishing precise sample intervals for holes 87-01, -03 and -08, Mr. John Wilson undertook re-logging of these holes in December, 1990. Further information concerning the sample intervals was obtained from Mr. Frank C. Loring, P.Eng. Mr. Wilson's diamond drill core logging report, including drill logs for the aforementioned three holes, is contained in Appendix II.

The Fred quartz vein structure was intersected in the four holes drilled and results confirmed a southerly dip of between 60 and 80 degrees. Core lengths of vein material ranged from 1.14 metres in the most westerly hole (DDH87-01) to 3.81 metres in DDH87-03 near the known eastern limits of the structure.

Geological relationships noted by the writer in DDH88-05 are believed to be representative of the Fred vein in the area drilled and they generally confirm relationships noted in surface exposures. The hole was collared in generally fresh, medium grained, grey quartz diorite locally cut by 0.5-5 metre wide, post-mineral basic dykes with chilled margins. Some 15 metres above the quartz vein intersection, the quartz diorite features an increasing number of quartz-carbonate-pyrite stringers plus increased

silicification and argillic-carbonate alteration. Disseminated pyrite and pyrrhotite is also a feature of more intensely altered zones and inclusions of Karmutsen volcanic rocks are evident. A 2 metre length of quartz vein, intersected between 47.5 and 49.5 metres, exhibits multiple stages of veining, drusy cavities and disseminated pyrite, pyrrhotite and chalcopyrite. An 8 metre section of variably altered quartz diorite, with 0.5 metre Karmutsen volcanic inclusions and a basic dyke, follows the quartz vein intersection with the hole terminating at 60 metres in relatively unaltered quartz diorite.

Sampling of drill cores from the four holes drilled on the Fred vein yielded the following results:

<u>Hole No.</u>	<u>Interval(m)</u>	<u>Length(m)</u>	<u>Au(oz/ton)</u>	<u>Ag(oz/ton)</u>	<u>Cu(%)</u>
DDH87-01	109.58-110.72	1.14	0.174	0.06	0.03
DDH87-03	33.50-34.29	0.79	0.112	0.48	0.80
	36.58-40.39	3.81	1.290	5.04	0.95
DDH87-08	71.63-72.88	1.25	0.290	0.05	0.03
DDH88-05	47.22-48.80	1.58	0.006	0.09	0.02
			(219ppb)	(3.0ppm)	(190ppm)

Bulk Sampling

Four 6-8 kg samples were collected from the Fred vein in 1988 and submitted to Coastech Research Inc. for preliminary metallurgical testing. Average head grades of a composite sample were 0.126 oz/ton gold and 0.29 oz/ton silver. Test work on the composite sample included standard flotation, gravity concentration and cyanidation procedures.

Results of the test work indicated that good recoveries for gold, silver, and copper could be obtained by initial gravity concentration to recover free milling coarse gold followed by froth flotation to produce a sulphide concentrate containing copper and precious metals.

CONCLUSIONS

The Macktush property includes a number of gold-bearing quartz-sulphide veins. Work to date in the central property area, which includes mechanical trenching and diamond drilling, has partially defined several vein structures with apparent good gold grades over reasonable widths. Recent excavator trenching has confirmed vein continuity within part of the previously drilled area of the Fred vein and has indicated strike extension of the structure and the presence of subsidiary vein structures. Work along the trend of the Red vein has confirmed an appreciable strike length for this structure. Further work is warranted to test continuity of gold grades of these and other zones along strike and to depth.

Limited sampling of several of the veins indicates a wide variation in gold content. While this is a characteristic feature of deposits of this type, it does emphasize the need for detailed sampling to determine average grades. As noted

previously, most of the known quartz veins strike northeasterly, normal to the regional structural trend as reflected by the northwest trending contact between the Island Intrusions and Karmutsen Formation volcanic rocks. The quartz veins in the central property area are marginal to this contact which is considered to be prospective for the discovery of additional gold-bearing veins throughout the claims area.

Other styles of mineralization known on the Macktush property include iron-copper skarns and porphyry copper and molybdenum. Further investigation is necessary to determine the significance of these.

The Macktush property merits additional work as detailed in the succeeding section.

RECOMMENDATIONS

A two-phase work program is recommended for the Macktush property with the principal emphasis of the Phase I program being directed to detailed mapping and sampling of the known gold-bearing vein structures. To facilitate this and to determine precise locations of the vein structures, a topographic map on a scale of 1:5000 should be prepared utilising available colour air photography and the existing survey control in the area of the Fred vein. It is intended

that such a map would cover the entire property area with more detailed (1:1000) coverage prepared for the area of the Fred and Red veins.

It is also recommended that a picket line grid be established with a baseline parallel to the trend of the Fred vein and cross lines at 100 metre spacings with 25 metre stations. This grid, totalling 38 km, would cover the area of the Island Intrusions - Karmutsen Formation contact over much of the COPPER 102 claim and could be used for tying in drill holes prior to a proper survey and also for conducting orientation VLF-EM and magnetometer geophysical surveys and the collection of soil samples in overburden covered areas.

The foregoing recommended work program will assist in defining areas for excavator trenching followed by diamond drilling.

Additional diamond drilling of the Fred vein structure is recommended as part of the Phase I program and should include -60° holes drilled from the four original drill sites. Four holes are also recommended to test the Red vein between the main showing and the indicated strike extension downhill to the northeast.

Phase II work would consist principally of additional excavator trenching and diamond drilling where warranted by the results of first phase work.

COST ESTIMATEPhase I

Topographic mapping	\$5,500.00
Picket line grid - 38 km @ \$400/km	\$15,200.00
Geological mapping, sampling	\$12,000.00
Geophysics - 38 km @ \$300/km	\$11,400.00
Soil Geochemistry - sample collection	\$5,000.00
Excavator trenching - 50 hours @ \$125/hour	\$6,250.00
Diamond drilling - 1000 metres @ \$125/metre	\$125,000.00
Sample analyses	\$20,000.00
Engineering, supervision, reporting	\$20,000.00
Contingencies @ 15%	<u>\$33,000.00</u>
Total, Phase I	\$253,350.00

Phase II (Contingent on results of Phase I Program)

Diamond drilling - 3000 metres @ \$125/metre	\$375,000.00
Excavator trenching - 50 hours @ \$115/hour	\$6,250.00
Sample Analyses	\$20,000.00
Engineering, supervision, reporting	\$50,000.00
Contingencies @ 15%	<u>\$67,700.00</u>
Total, Phase II	\$518,950.00

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COST ESTIMATE

Phase I

Topographic mapping	\$5,500.00
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Geological mapping, sampling	\$12,000.00
Geophysics - 38 km @ \$300/km	\$11,400.00
Soil Geochemistry - sample collection	\$5,000.00
Excavator trenching - ²⁵ 50 hours @ \$125/hour	\$6,250.00 3125
Diamond drilling - ⁵⁰⁰ 1000 metres @ \$125/metre	\$125,000.00 62500
Sample analyses	\$20,000.00 17,500
Engineering, supervision, reporting	\$20,000.00
Contingencies @ 15%	\$33,000.00 22800
Total, Phase I	\$253,350.00 175,025.00

Phase II (Contingent on results of Phase I Program)

Diamond drilling - 3000 metres @ \$125/metre	\$375,000.00
Excavator trenching - 50 hours @ \$115/hour	\$6,250.00
Sample Analyses	\$20,000.00
Engineering, supervision, reporting	\$50,000.00
Contingencies @ 15%	<u>\$67,700.00</u>
Total, Phase II	\$518,950.00

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- _____ (1991): Review of Work Done on the Macktush Property to July 10, 1991, Alberni Mining Division, B.C. -private report for SYMC Resources Ltd.

CERTIFICATE

I, NICHOLAS C. CARTER of Victoria, British Columbia, do hereby certify that:

1. I am a Consulting Geologist registered with the Association of Professional Engineers and Geoscientists of British Columbia since 1966.
2. I am a graduate of the University of New Brunswick with B.Sc.(1960), Michigan Technological University with M.S.(1962) and the University of British Columbia with Ph.D.(1974).
3. I have practised my profession in eastern and western Canada and in parts of the United States for more than 25 years.
4. The foregoing report on the Macktush Property, Alberni Mining Division, British Columbia, is based on personal examinations of parts of the property in 1990,1991 and 1993, on a review of published and unpublished reports and maps and on information provided by SYMC Resources Ltd. which includes a compilation of previous work and re-logging of previously drilled holes by John Wilson, FGAC.
5. I hold no interest, directly or indirectly, in the mineral claims comprising the Macktush property or in the securities of SYMC Resources Ltd. nor do I expect to receive any such interest.

N.C. Carter, Ph.D. P.Eng.

Victoria, B.C.
January 17, 1994

N.C. CARTER, Ph.D., P.Eng.
CONSULTING GEOLOGIST