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September 30, 2011

TRIUMF

4004 Wesbrook Mall (UBC) Vancouver, B.C.

Attention

Mr. Grant Minor

Reference:

Target Hall Bridge Crane

This letter is to certify that the Norelco 20/3 Ton capacity top running double-girder electric overhead travelling crane S/N 2610 was successfully load tested on January 21, 2011.

The crane was load tested for a 20 Ton max. S.W.L. (safe working load) in accordance with CSA and WCB requirements. The following is an outline of the work completed and the test results.

A: 100% Load Test Completed

- A test load of 37,400 lbs +/- (93.5%) was suspended from hoist (see Note 3 below)
- Structural deflection of bridge beam measured (at mid span) was 3/16"
- Hoist brake operation checked 3 times in slow speed & 3 times in fast speed
- Load lifted to (near) upper limit
- Trolley and bridge brakes checked for correct operation
- Trolley and bridge operation tested over full extents of travel in both slow and fast speed.

B: 125% Load Test Completed

- A test load of 47,200 lbs +/- (118%) was suspended from hoist (see Note 3 below).
- Structural deflection of bridge beam measured (at mid span) was 1/4"
- Hoist brake operation checked 3 times in slow speed & 3 times in fast speed
- Load lifted to (near) upper limit

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Certified to CSA W47.1

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C: Notes

- Load testing was performed by Mike Smith and Gordon Minot from Norelco Industries Ltd.
- 2. Load testing was witnessed by Grant Minor from TRIUMF
- 3. Test loads were supplied by TRIUMF. Loads were compromised of steel/concrete blocks of known weight as follows:

100% Test: 30,000 lbs + 7200 lbs + 200 lbs (rigging) = 37,400 lbs (scale readout = 36,200 lbs) 125% Test: 28,800 lbs + 18,300 lbs + 100 lbs (rigging) = 47,200 lbs (scale readout = 47,100 lbs)

We trust the above information meets with your requirements. If you have any questions or concerns, please do not hesitate to contact us.

Sincorcly,

Keith Ellis

General Manager

Norelco Industries Ltd