

2040 West 10th Avenue Vancouver, BC Canada V6J 2B3 Tel: 604-734-8821 Fax: 604-732-4801 http://www.weir-jones.com

Records of Earthquake Obtained at the Earthquake Early Warning System Site. (18:02:53, January 7, 2015)

Author: Anton Zaicenco, Ph.D., P.Eng. <anton.zaicenco@weir-jones.com>

1 Earthquake parameters

Source: http://neic.usgs.gov/neis/qed/

Location: 18 km E of Tofino.

Magnitude: M=4.8

Time: 18:02:53 UTC-08:00.

Location: Latit 49.171°N, Longit 125.647°W. Depth 24.6 km.

Hypocentral distance: $D \approx 187$ km. Distance in degrees: $\Delta \approx 1.7^{\circ}$.

IASP-91 travel time curves are used to compute P- and S-wave arrivals. They are: $t_P \approx 29$ sec, and $t_S \approx 51$ sec. S-P time difference ≈ 22 sec.

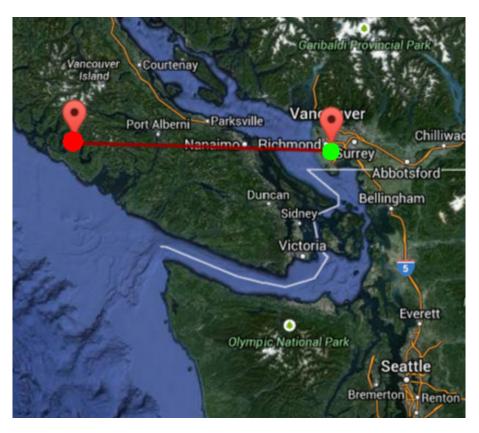


Figure 1: Map of the region. Red dot – earthquake epicenter, green dot – George Massey Tunnel.

2 Sample earthquake record

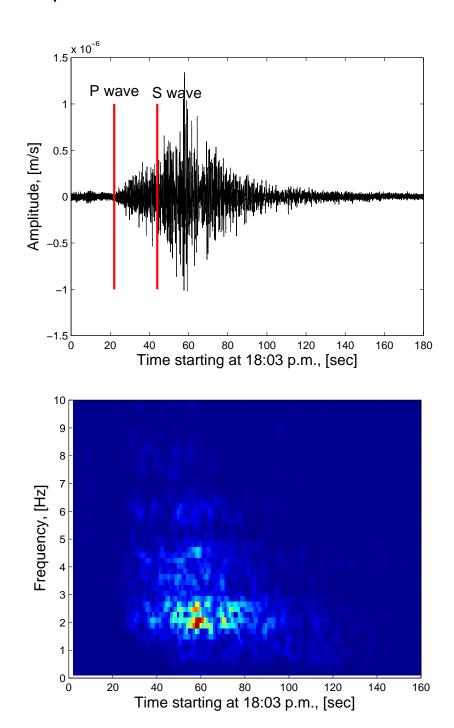


Figure 2: Record on the North end of the tunnel: channel 10 (X component) (\approx 49 m depth) and its time-frequency distribution