

Port of Tauranga Methyl Bromide Fumigation Monitoring – Interim Report 17

Fumigation and venting details can be found in Table 1.

Table 1: Monitoring details

Date	05/12/2020
Fumigation Type	Log stacks
Fumigation amount (kg) – during 1hr sampling	111
Fumigation Location	Reefa
Venting Time	09:49-10:59
*Sample time (1hour)	09:49-10:49
*Predominant wind direction over 1 hour sample	W/WNW
*Average wind speed over 1 hour period	1.0m/s
Sample date (24 hour)	05/12/2020 – 06/12/2020
Sample time/s (24 hour)	09:40-09:46
Other venting in the 24 hour period	None

*1 hour Sample times differ from the total venting time i.e. venting was shorter than the 1 hour sample period


*From observations at the time of sampling, measured met data is provided in a separate document.

Table 2: Fumigation and Venting Details 05/12/2020

Row	Log Volume (JAS)	Covered Volume (m ³)	Methyl Bromide used (kg)	Pre-vent Concentration (ppm)	Methyl Bromide Released (kg)
R01SHED4	519.3	920	111	Not Recorded by Genera	Not Recorded by Genera

Map 1: Fumigation and Sampling Locations 05/12/2020

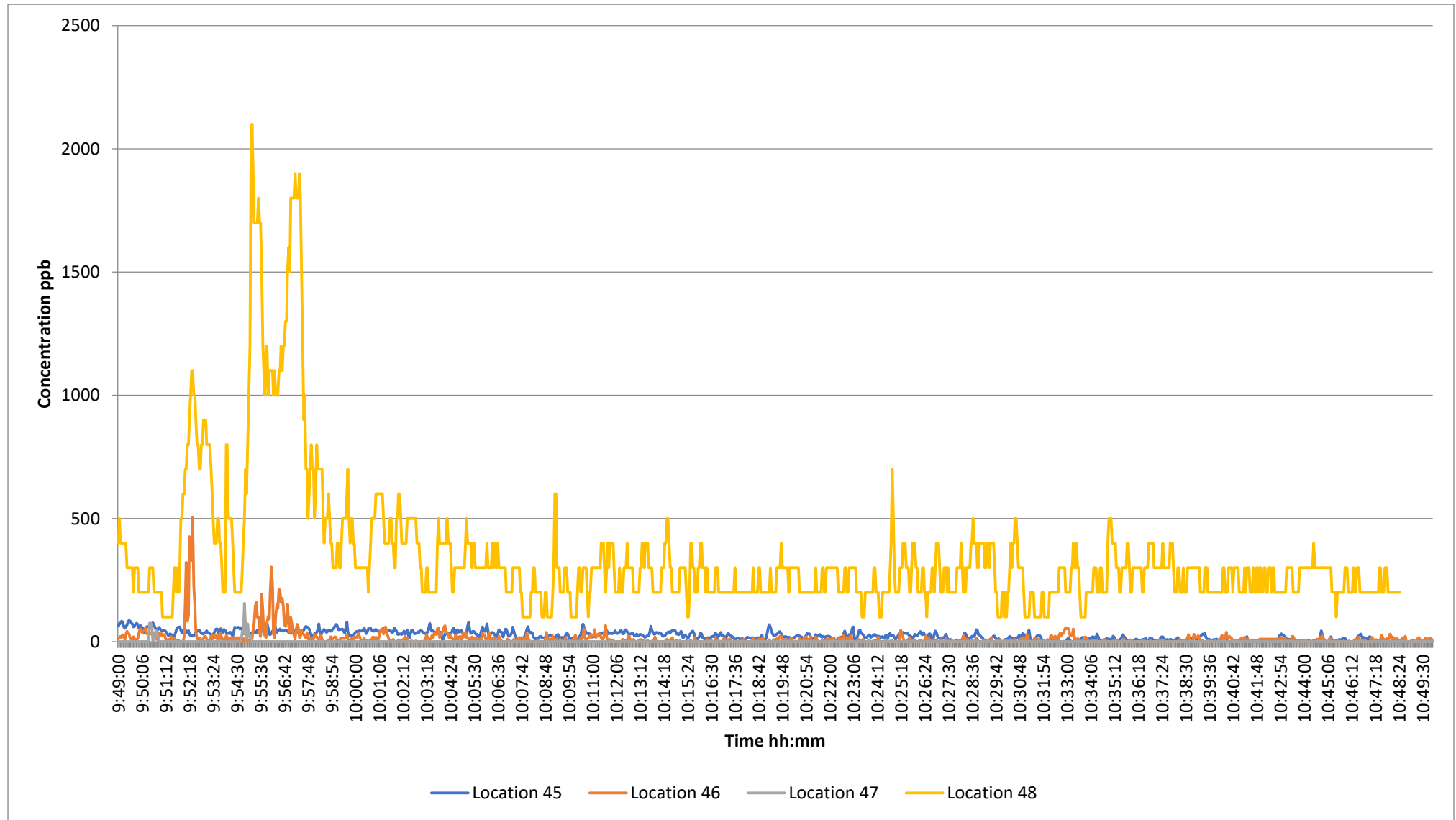


 Log stack venting (please note locations are only approximate)

 Sample locations

1-hour canister sampling and TVOC monitoring was undertaken at locations 45, 46, 47 and 48 from 09:49-10:49. 24-hour canister sampling was also undertaken at location 46 and 48. The average and peak TVOC measurements for the sampling period are shown below in Table 3 and Graphs 1-5. Canister sampling results can be found in Table 4.

Graph 1: Real-time Total Volatile Organic Compound (TVOC) measurements at all 1-hour sampling locations on the 05/12/2020



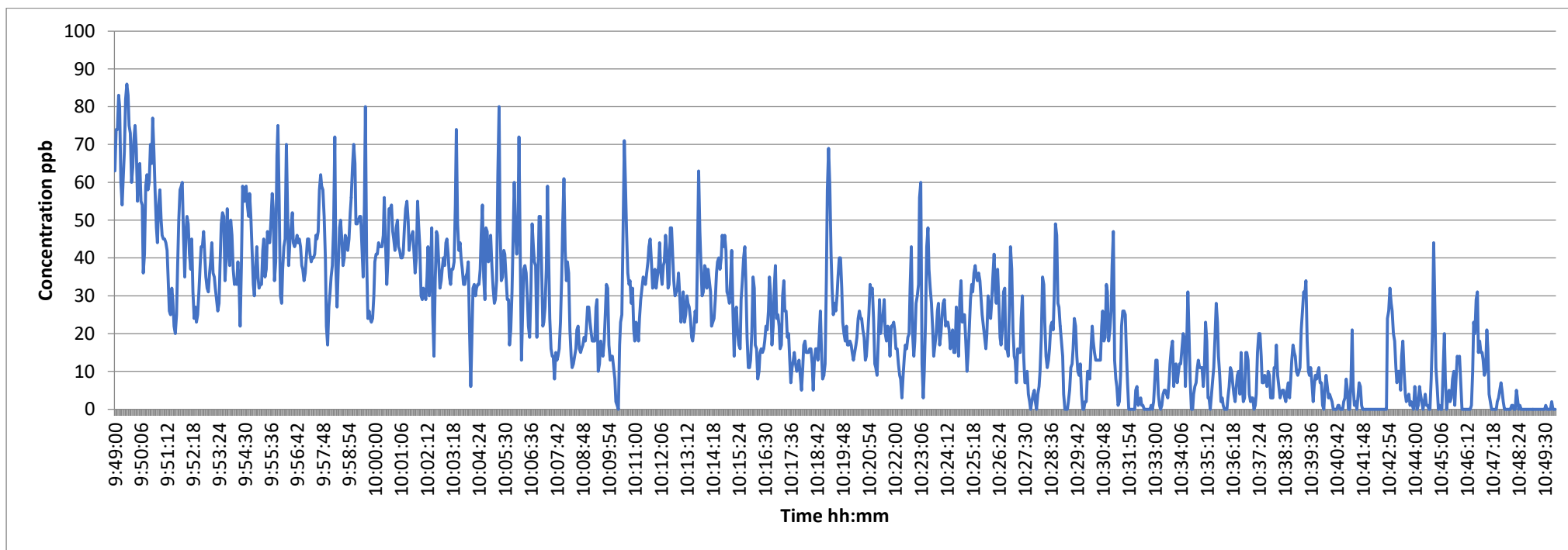
Notes: concentrations have not been corrected for methyl bromide and measurements will account for all VOC's including methyl bromide

Table 3: Average and peak real-time TVOC measurements on the 15/12/2020

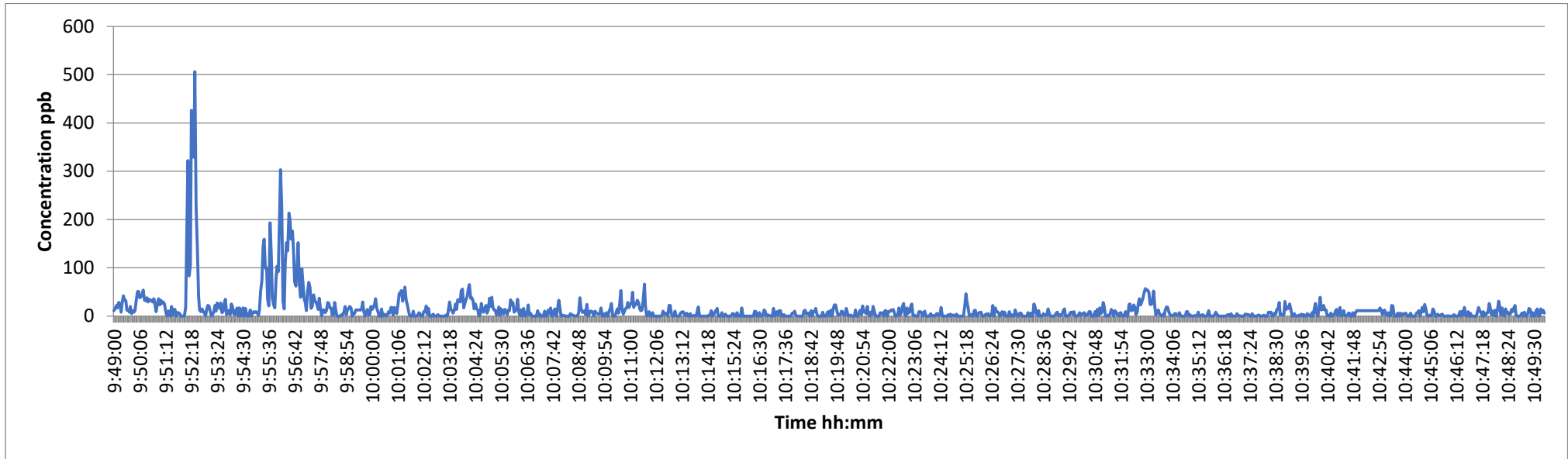
Location (as shown on Map 1)	Average TVOC measured over sampling period (ppb)*	Peak TVOC measured over sampling period (ppb)*
45 On port (in front of Shed 5)	24	86
46 KiwiRail Yard North	14	506
47 On port (Coal Chute)	1	155
48 KiwiRail Yard Middle	346	2100

*Concentrations have not been corrected for methyl bromide

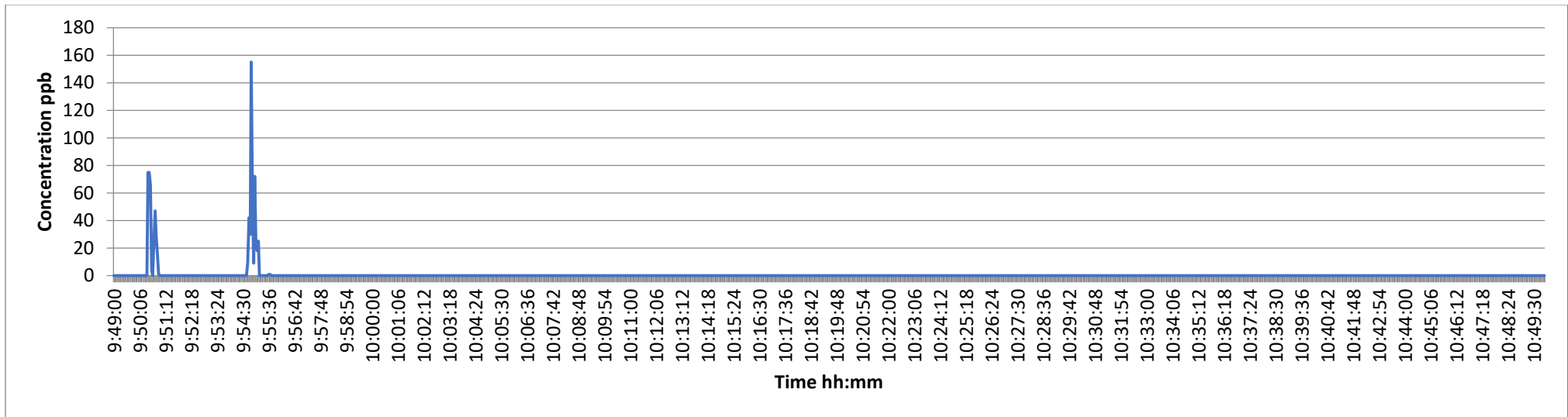
Graph 2: TVOC concentrations measured at Location 45- 05/12/2020



Graph 3: TVOC concentrations measured at Location 46 – 05/12/2020



Graph 4: TVOC concentrations measured at Location 47 – 05/12/2020



Graph 5: TVOC concentrations measured at Location 48 – 05/12/2020

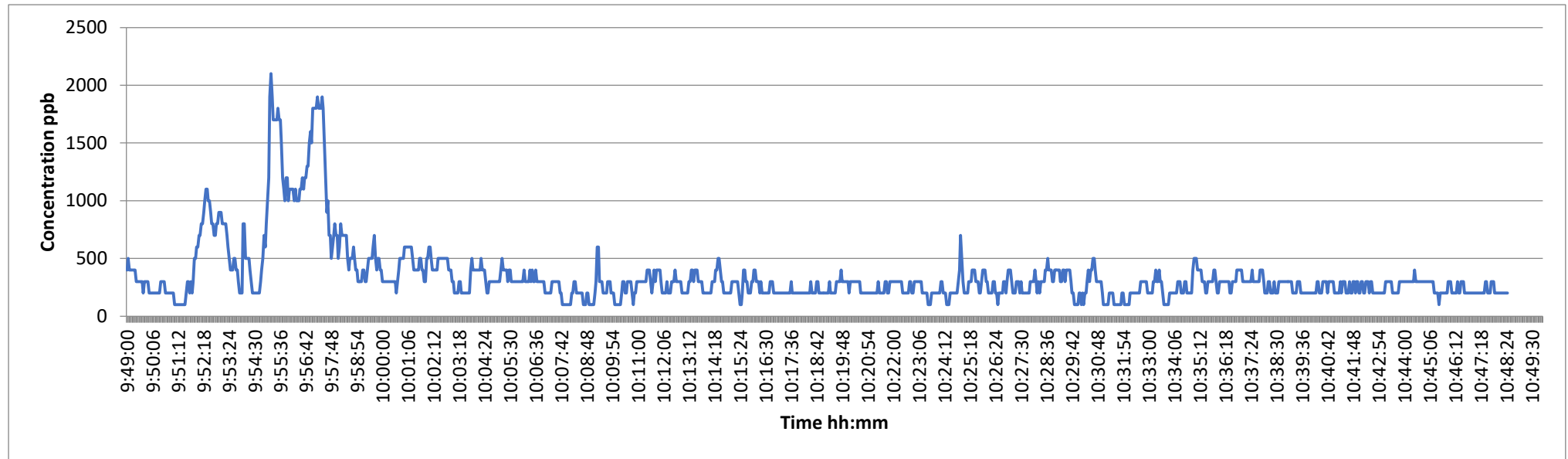


Table 4: 1-hour and 24-hour Canister Sampling Results 05/12/2020

Location (as shown on map above)		Sample Number	Sample length	Sample Time	Canister size	Methyl bromide Concentration (ppbv)
45	On port (in front of Shed 5)	19827-0512-45	1 hour	09:49-10:49	1.4L	<6±0.8
46	KiwiRail Yard North	19827-0512-46	1 hour	09:49-10:49	1.4L	33.6±5.2
46A		19827-0512-46A	24 hours	09:46-09:46	6L	15.8±2.5
47	On port (Coal Chute)	19827-0512-47	1 hour	09:49-10:49	1.4L	47.6±7.3
48	KiwiRail Yard Middle	19827-0512-48	1 hour	09:49-10:49	1.4L	186±29
48A		19827-0512-48A	24 hours	09:40-09:40	6L	15.3±2.4