

## Port of Tauranga Methyl Bromide Fumigation Monitoring – Interim Report 15

Fumigation and venting details can be found in Table 1.

Table 1: Monitoring details

Date	16/11/2020
Fumigation Type	Log stacks
Fumigation amount (kg) – during 1hr sampling	135
Fumigation Location	Fumopad
Venting Time	16:02-18:30
*Sample time (1hour)	16:05-17:05
*Predominant wind direction over 1 hour sample	W/SW
*Average wind speed over 1 hour period	2.3m/s
Sample date (24 hour)	16/11/2020 – 17/11/2020
Sample time/s (24 hour)	14:49-14:55
Other venting in the 24 hour period	2 x row in Fumpoad and 1x ST01

\*1 hour Sample times differ from the total venting time i.e. venting went on for longer 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 16/11/2020

Row	Log Volume (JAS)	Covered Volume (m <sup>3</sup> )	Methyl Bromide used (kg)	Pre-vent Concentration (ppm)	Methyl Bromide Released (kg)
FP02A	642	1120	135	Not recorded by Genera	Not recorded by Genera

Map 1: Fumigation and Sampling Locations 16/11/2020

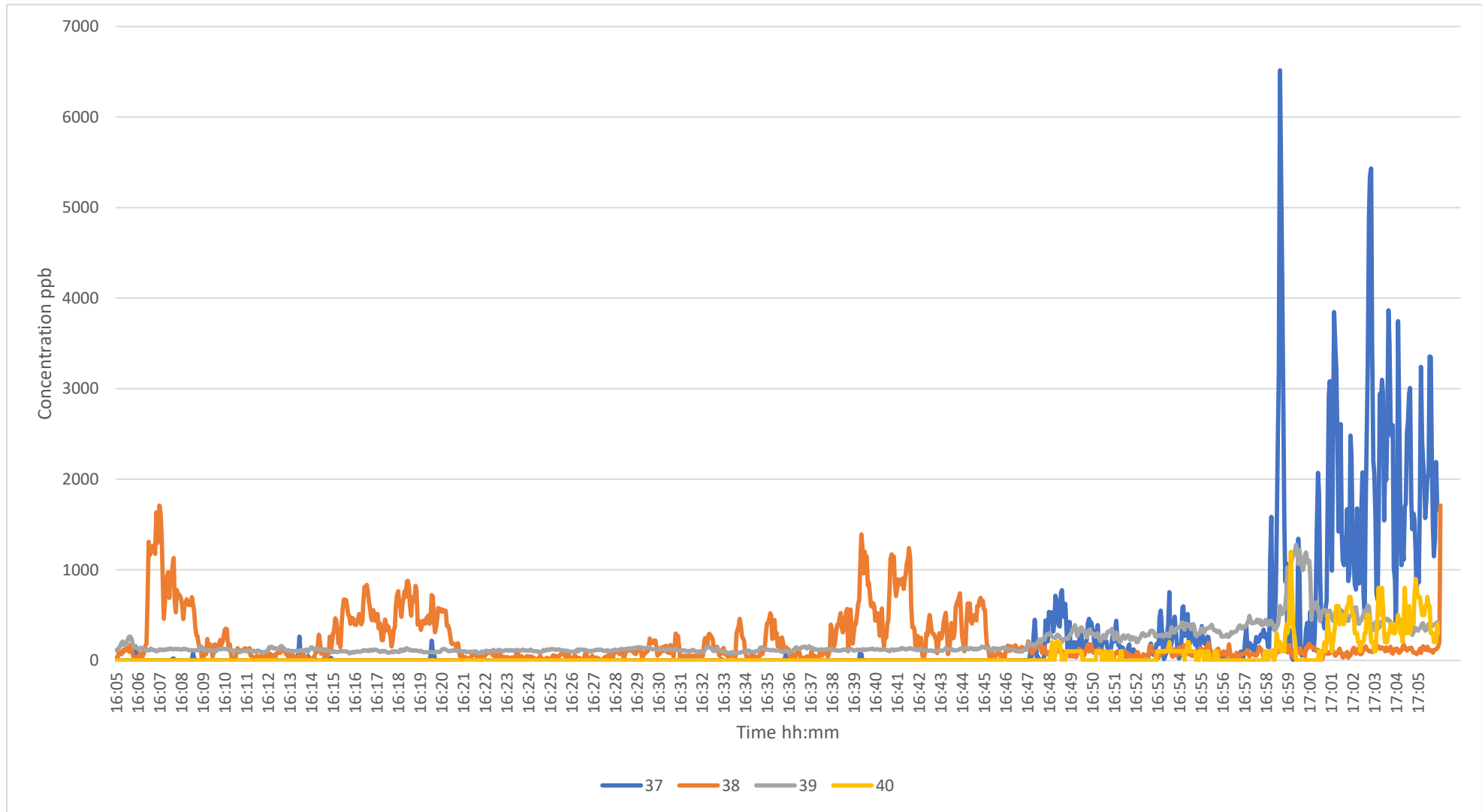


 Log stack venting (please note locations are only approximate)

 Sample locations

1-hour canister sampling and TVOC monitoring was undertaken at locations 37, 38, 39 and 40 from 1605-1705. 24-hour canister sampling was also undertaken at location 38 and 39. The average and peak TVOC measurements for the sampling period are shown below in Table 3 and Graphs 1-4. 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 16/11/2020



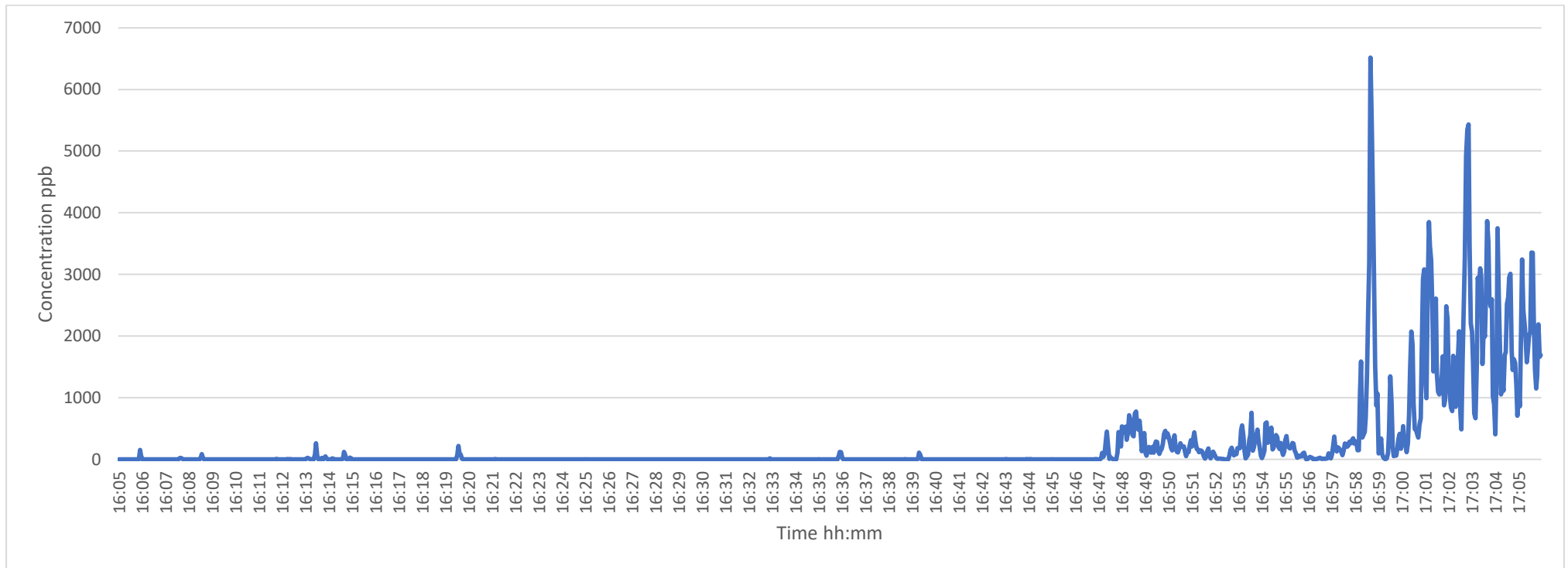
Notes: concentrations have not been corrected for methyl bromide and measurements will account for all VOC's including methyl bromide

Table 3: Average and peak real-time TVOC measurements on the 16/11/2020

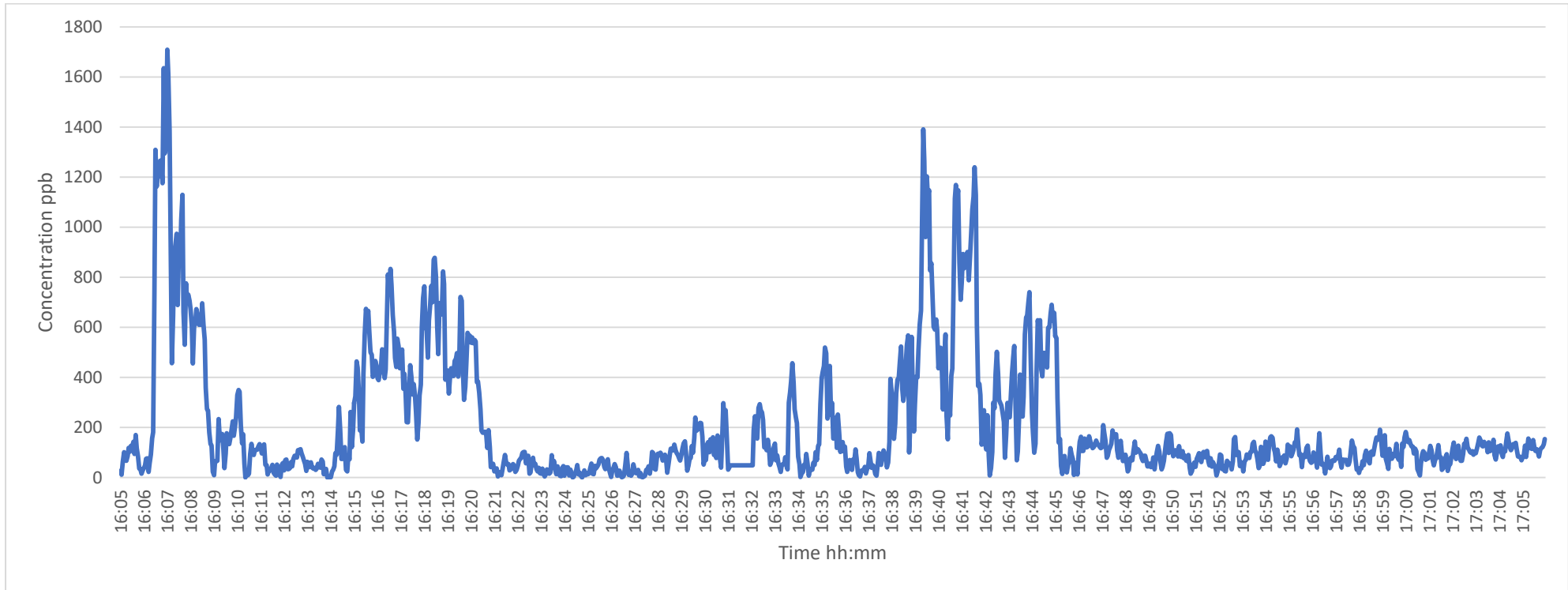
Location (as shown on Map 1)	Average TVOC measured over sampling period (ppb)*	Peak TVOC measured over sampling period (ppb)*
37 On port (eastside of Tasman Quay)	250	6517
38 KiwiRail Yard North	205	1709
39 KiwiRail Yard Middle (Coal Chute)	203	1277
40 KiwiRail Yard South	49	1200

\*Concentrations have not been corrected for methyl bromide

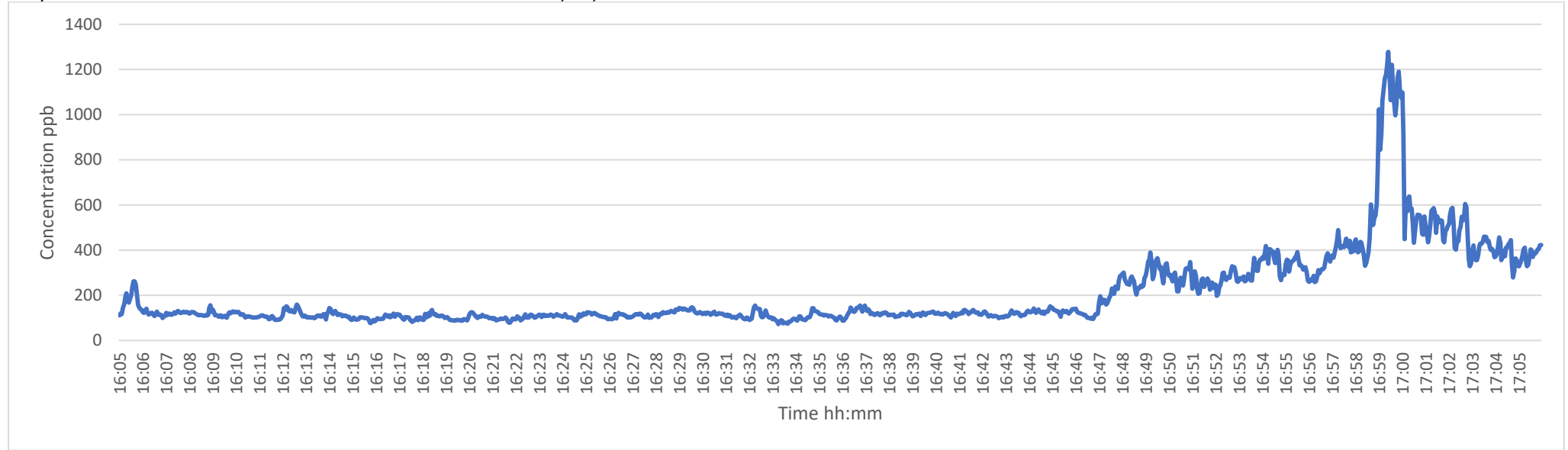
Graph 2: TVOC concentrations measured at Location 37 – 16/11/2020



Graph 2: TVOC concentrations measured at Location 38 – 16/11/2020



Graph 3: TVOC concentrations measured at Location 39- 16/11/2020



Graph 4: TVOC concentrations measured at Location 40- 16/11/2020

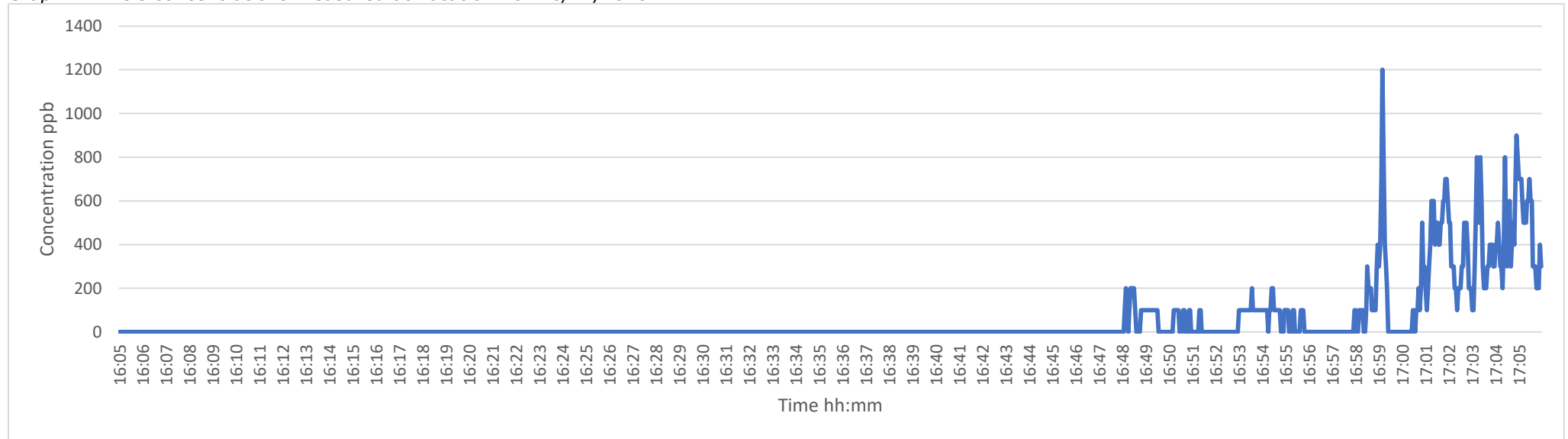


Table 4: 1-hour and 24-hour Canister Sampling Results 16/11/2020

Location (as shown on map above)		Sample Number	Sample length	Sample Time	Canister size	Methyl bromide Concentration (ppbv)
37	On port (eastside of Tasman Quay)	19827-1611-37	1 hour	16:05-17:05	1.4L	269±41
38	KiwiRail Yard North	19827-1611-38	1 hour	16:05-17:05	1.4L	203±31
38A		19827-1611-38A	24 hours	14:55-14:55	6L	40.2±6.2
39	Kiwirail Yard Middle (Coal Chute)	19827-1611-39	1 hour	16:05-17:05	1.4L	94±15
39A		19827-1611-39A	24 hours	14:49-14:49	6L	24.1±3.7
40	Kiwirail Yard South	19827-1611-40	1 hour	16:05-17:05	1.4L	70±11