

Port of Tauranga Methyl Bromide Fumigation Monitoring – Interim Report 19

Fumigation and venting details can be found in Table 1.

Table 1: Monitoring details

Date	20/01/21
Fumigation Type	Log stacks
Fumigation amount (kg) – during 1hr sampling	221
Fumigation Location	Fumopad
Venting Time	11:36 - 12:36
*Sample time (1hour)	11:36 – 12:36
*Predominant wind direction over 1 hour sample	SSW/SW
*Average wind speed over 1 hour period	1.4m/s
Sample date (24 hour)	28/12/2020
Sample time/s (24 hour)	11:33 – 11:33 & 11:27 – 11:30
Other venting in the 24 hour period	16 rows berth 11, 2 rows on Reefa

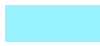
**From observations at the time of sampling, measured met data is provided in a separate document.*

Table 2: Fumigation and Venting Details 28/21/2020

Row	Log Volume (JAS)	Covered Volume (m ³)	Methyl Bromide used (kg)	Pre-vent Concentration (ppm)	Methyl Bromide Released (kg)
FP07	1074	1835.5	221	21483.3	65.4

Map 1: Fumigation and Sampling Locations 28/12/2020

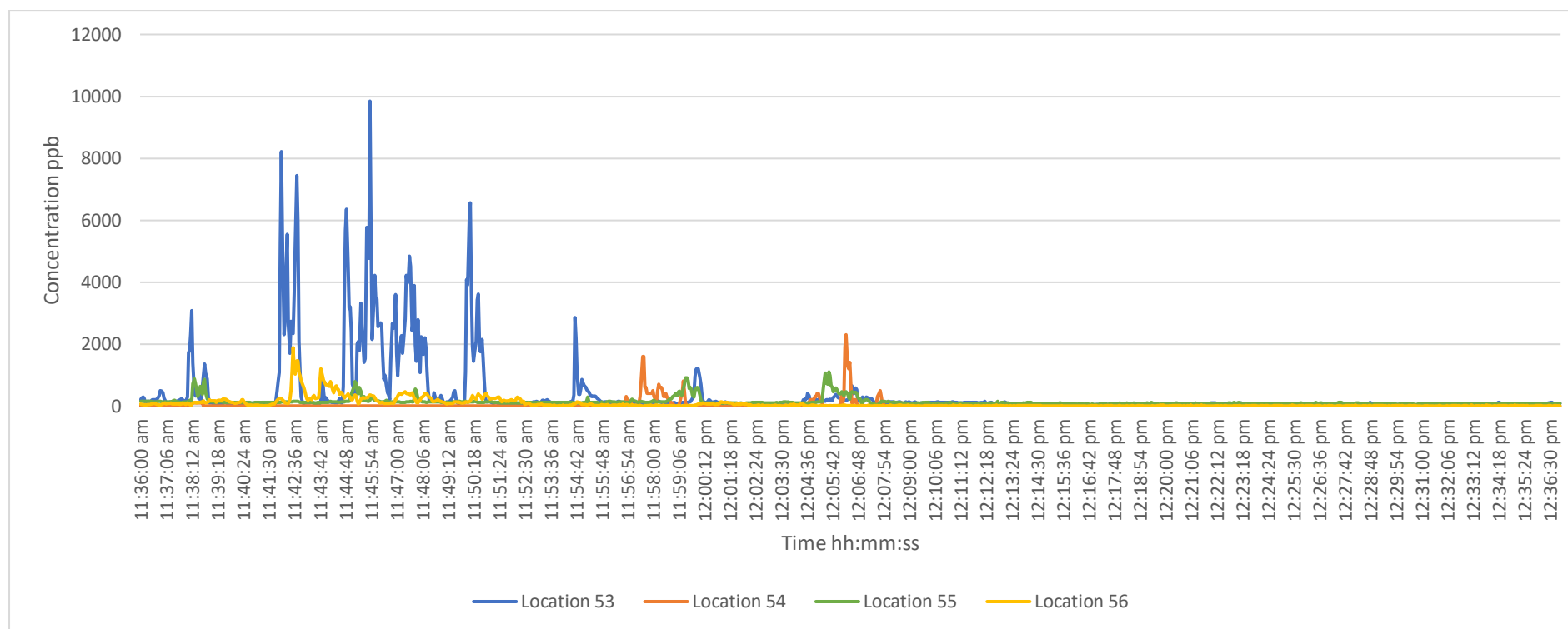


 Log stack venting (please note locations are only approximate)

 Sample locations

1-hour canister sampling and TVOC monitoring was undertaken at locations 53, 54, 55 and 56 from 09:32 through to 10:32. 24-hour canister sampling was also undertaken at location 54 and 56A. The average and peak TVOC measurements for the sampling period are provided in Table 3 and in Graphs 1 through 5. Canister sampling results are presented in Table 4.

Graph 1: Real-time Total Volatile Organic Compound (TVOC) measurements at all 1-hour sampling locations on the 28/12/2020



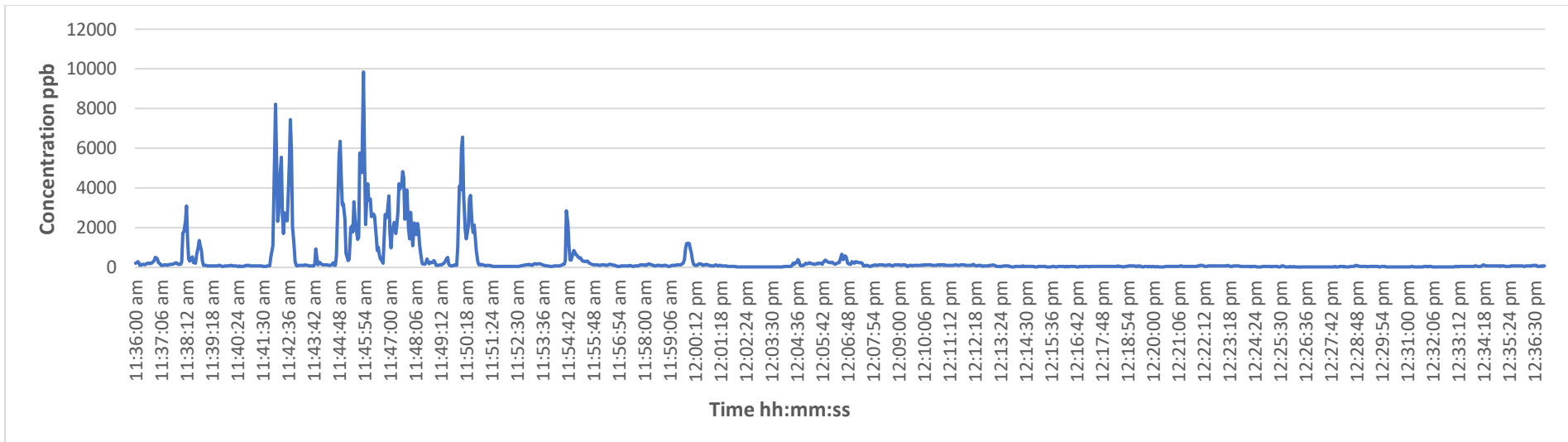
Notes: concentrations are not corrected for methyl bromide and measurements will account for all VOC's including methyl bromide

Table 3: Average and peak real-time TVOC measurements on the 28/12/2020

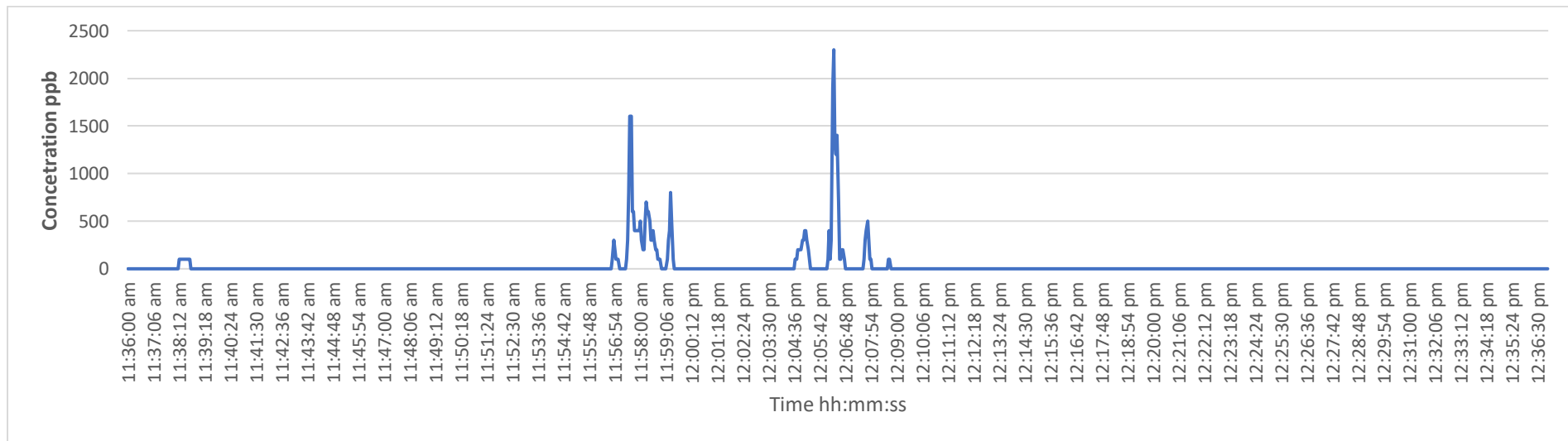
Location (as shown on Map 1)	Average TVOC measured over sampling period (ppb)*	Peak TVOC measured over sampling period (ppb)*
53 On port (Tasman Quay Opposite Reefa)	366	9,846
54 South Between Stacks	27	2,300
55 Southend of Shed 10	127	1,009
56 Independent Stevedores	72	1,882

*Concentrations are not corrected for methyl bromide

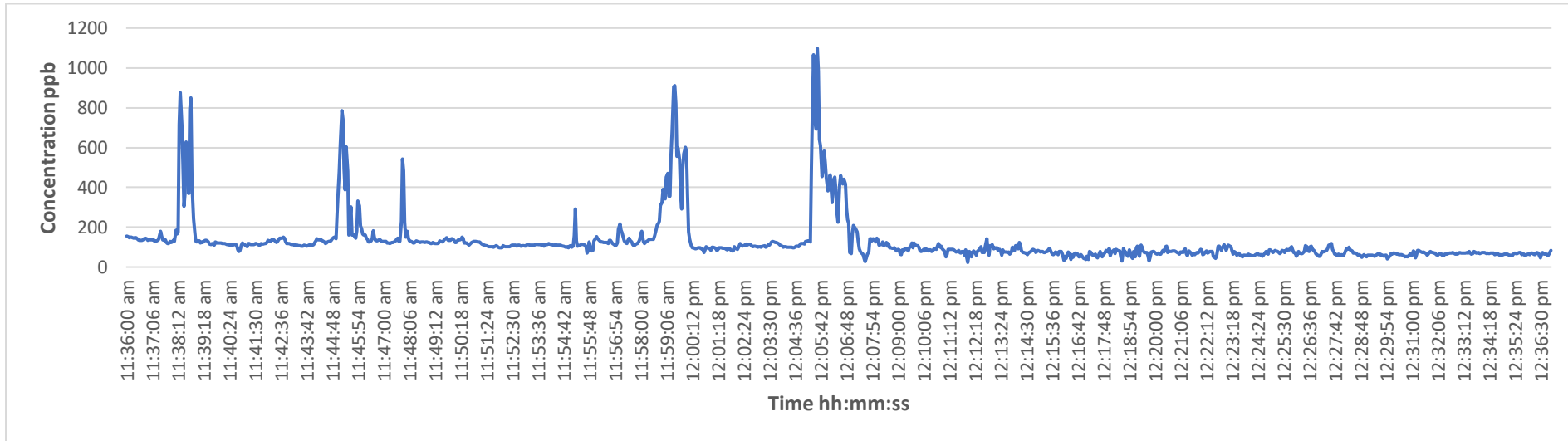
Graph 2: TVOC concentrations measured at Location 53 – 28/12/2020



Graph 3: TVOC concentrations measured at Location 54 – 28/12/2020



Graph 4: TVOC concentrations measured at Location 55 – 28/12/2020



Graph 5: TVOC concentrations measured at Location 56 – 28/12/2020

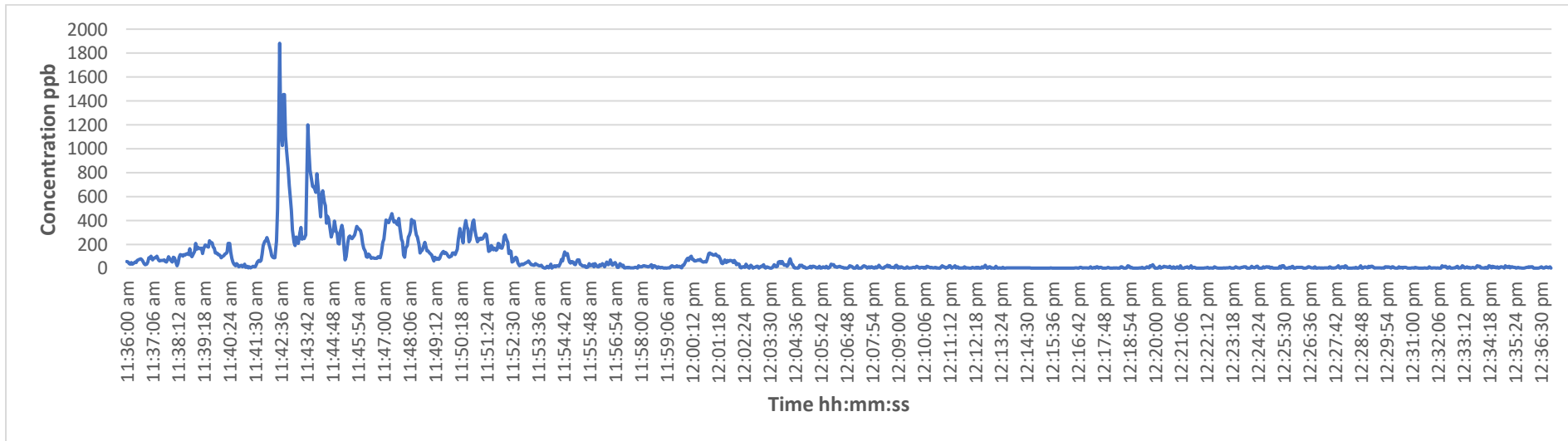


Table 4: 1-hour and 24-hour Canister Sampling Results 28/12/2020

Location (as shown on map above)		Sample Number	Sample length	Sample Time	Canister size	Methyl bromide Concentration (ppbv)
53	On port (Tasman Quay Opposite Reefa)	19827-28-12-53	1 hour	11:36 – 12:36	1.4L	629 ± 96
54	South Between Stacks	19827-28-12-54	1 hour	11:36 – 12:36	1.4L	64 ± 9.8
54A	South Between Stacks	19827-28-12-54A	24 hours	11:33 -12:33	6L	13 ± 2.0
55	Southend of Shed 10	19827-28-12-55	1 hour	11:36 – 12:36	1.4L	94 ± 15
56	Independent Stevedores	19827-28-12-56	1 hour	11:36 – 12:36	1.4L	132 ± 21
56A	North end of Shed 10	19827-28-12-56A	24 hours	11:27 – 11:30*	6L	13 ± 1.3

*Sample time slightly greater than 24hours