

Port of Tauranga Methyl Bromide Fumigation Monitoring – Interim Report 10

Fumigation and venting details can be found in Table 1.

Table 1: Monitoring details

Date	11/06/2020
Fumigation Type	Log stacks
Fumigation amount (kg) – during 1hr sampling	238
Fumigation Location	Reefer
Venting Time	15:18-18:30
*Sample time (1hour)	15:14-16:14
*Predominant wind direction over 1 hour sample	South westerly
*Average wind speed over 1 hour period	0.5-1.5 m/s
Sample date (24 hour)	11/06/2020-12/06/2020
Sample time/s (24 hour)	10:08-10:08 (location 1) 10:05-10:05 (location 2)
Other venting in the 24 hour period	1 row on 6 Berth, 4 rows on Reefer and 4 rows on Fumopad

*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 11/06/2020

Row (North to South)	Log Volume (JAS)	Covered Volume (m ³)	Methyl Bromide used (kg)	Pre-vent Concentration (ppm)	Methyl Bromide Released (kg)
RFA16	799	1080	130	12100	-1
RFA18	524	899.2	108	5150	-1

⁻¹ Data not provided by Genera

Map 1: Fumigation and Sampling Locations 11/06/2020

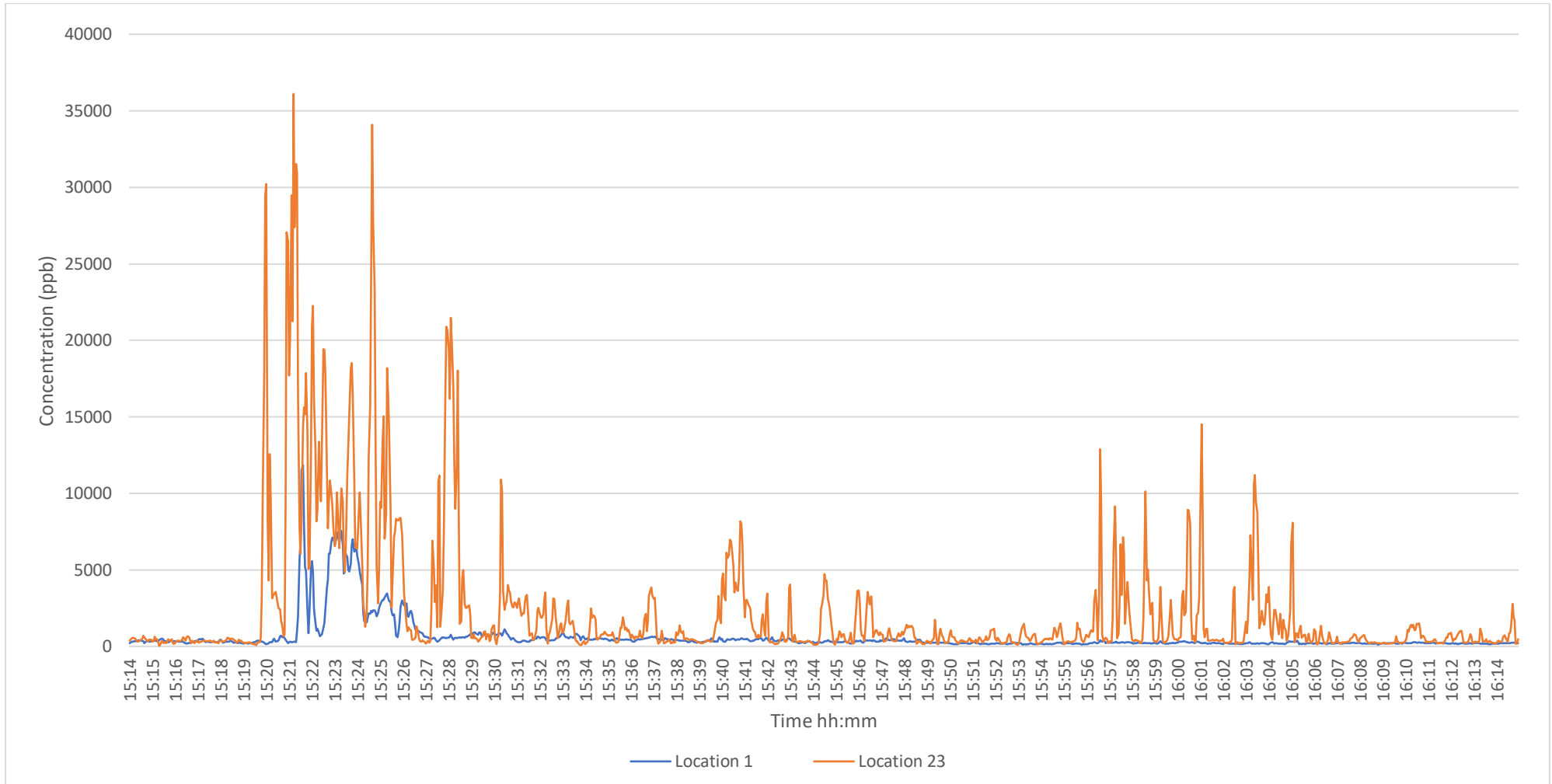


 1 hr Log stack venting (please note locations are only

 Sample locations

1-hour canister sampling was undertaken at locations 1, 2 and 23 from 15:14-16:14. TVOC monitoring was undertaken at locations 1 and 23 across the 1-hour sampling period. 24-hour canister sampling was undertaken at location 1 and 2. The average and peak TVOC measurements for the sampling period are shown below in Table 3 and Graphs 1-3. 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 11/06/2020



Notes: 15:14 start of canister sampling. Please note: concentrations have not been corrected for methyl bromide and measurements will account for all VOC's including methyl bromide

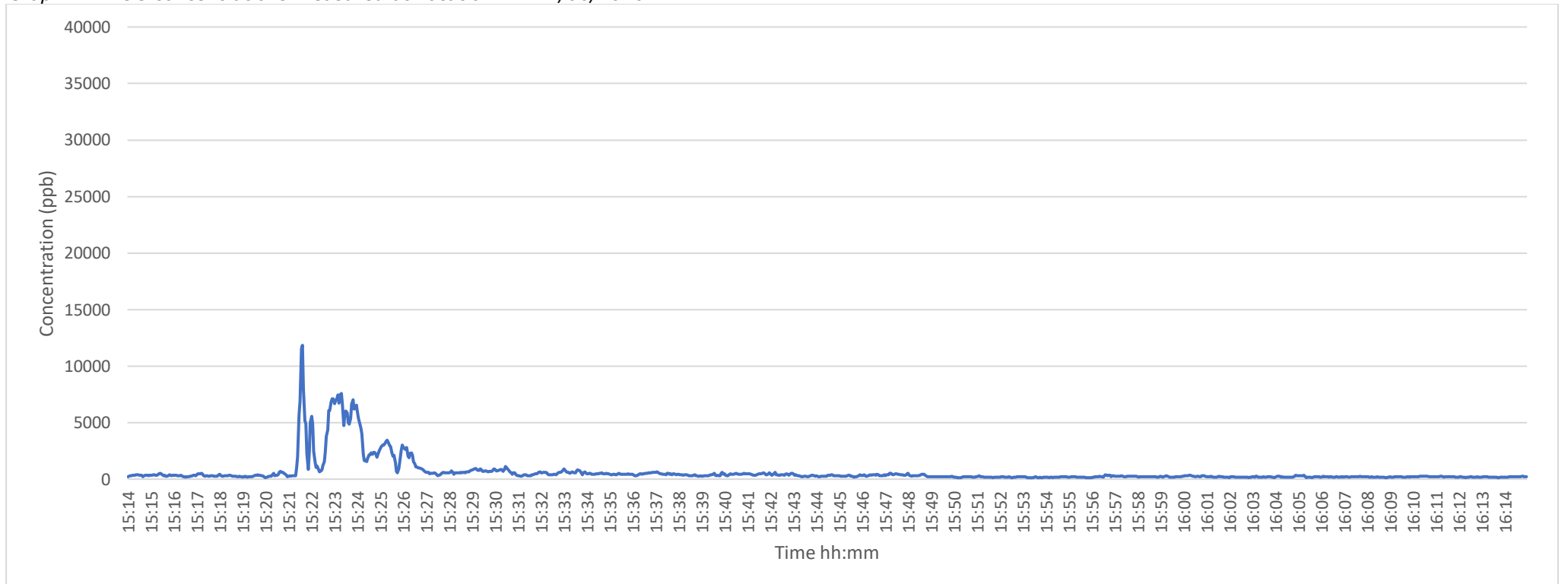
Table 3: Average and peak real-time TVOC measurements on the 11/06/2020

Location (as shown on Map 1)		Average TVOC measured over sampling period (ppb)*	Peak TVOC measured over sampling period (ppb)*
1	KiwiRail Boundary	615	11844
2	Next to coal shoot KiwiRail Boundary	_1	_1
23	Port – opposite Reefer	2408	36106

*Concentrations have not been corrected for methyl bromide

¹ No data recorded due to a problem with the PID

Graph 2: TVOC concentrations measured at Location 1 – 11/06/2020



Graph 3: TVOC concentrations measured at Location 23 - 11/06/2020

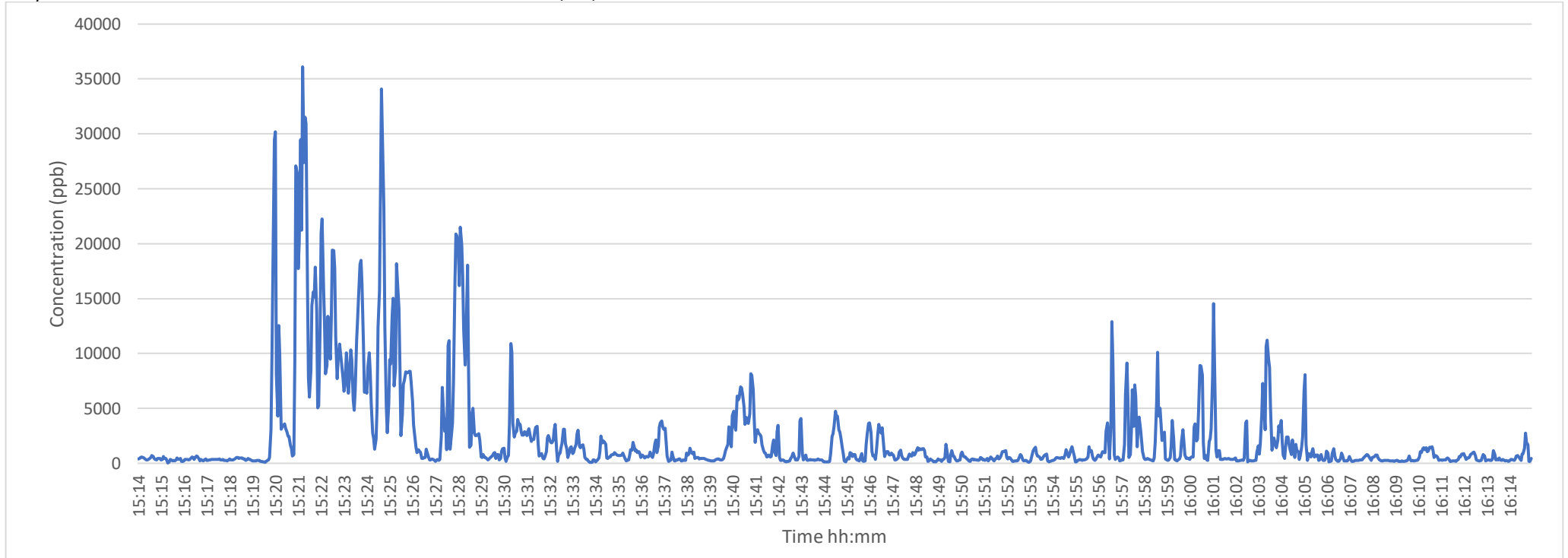


Table 4: 1-hour and 24-hour Canister Sampling Results 11-12/06/2020

Location (as shown on map above)		Sample Number	Sample length	Sample Time	Canister size	Methyl bromide Concentration (ppbv)
1	Kiwi Rail Boundary	19827-1106-2	1 hour	15:14 – 16:14	1.4L	591±90
		19827-1106-2A	24 hour	10:08 – 10:08	6L	202±31
2	Next to coal shoot KiwiRail Boundary	19827-1106-1	1 hour	15:14 – 16:14	1.4L	149±23
		19827-1106-1A	24 hour	10:05 – 10:05	6L	81±13
23	Port – opposite Reefer	19827-1106-23	1 hour	15:14 – 16:14	1.4L	4790±730