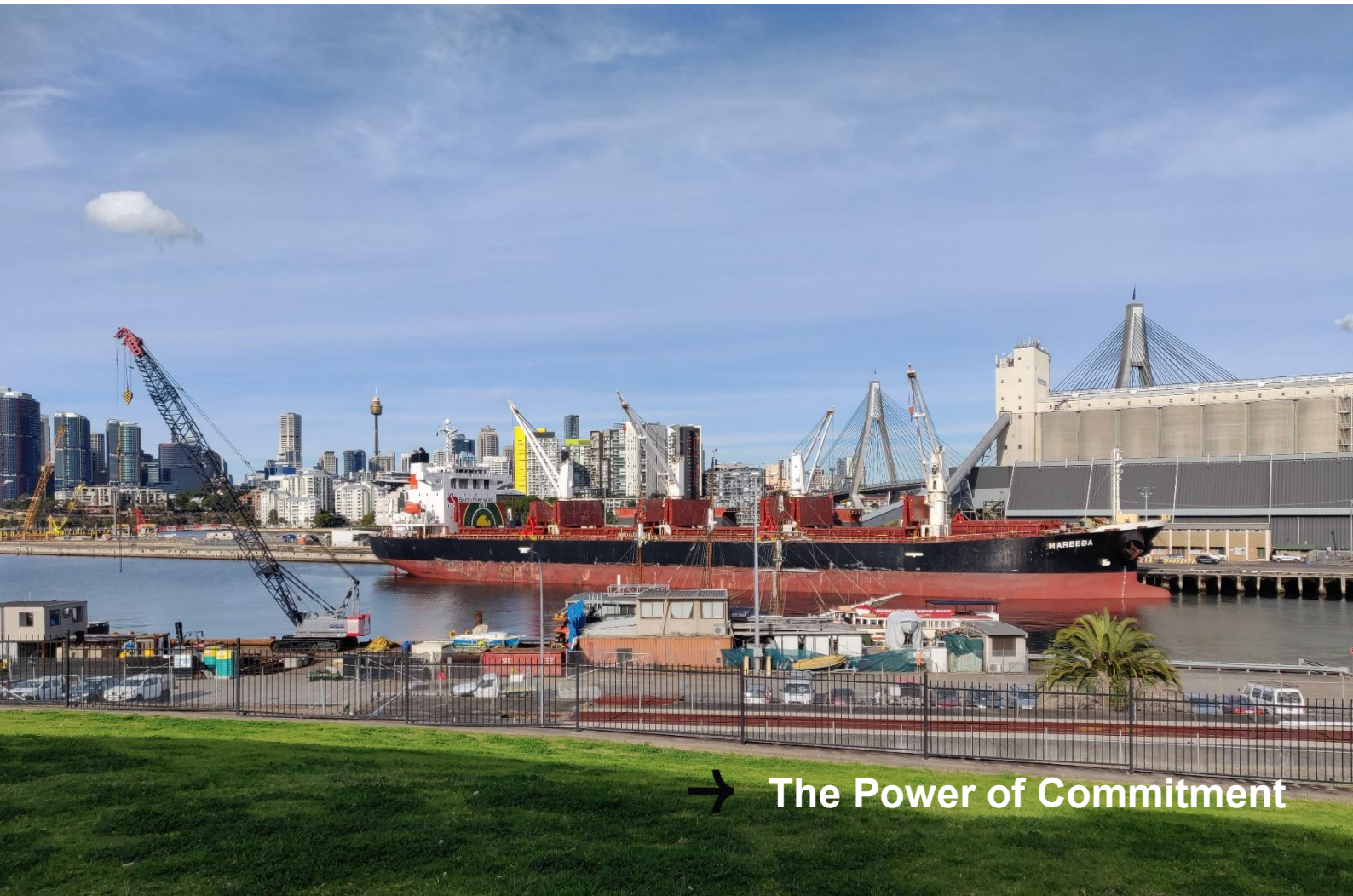
Monthly compliance noise monitoring report

Glebe Island / White Bay

Port Authority of New South Wales

July 2025



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1. Introduction

GHD Pty Ltd (GHD) has been engaged by Port Authority of New South Wales (Port Authority) to undertake compliance noise monitoring, as required by the *Port Noise Policy (Port Authority, 2020).*

This report provides the details of the compliance noise monitoring for all vessels at berth during July 2025, as determined using the noise monitoring system. A detailed description of the permanent noise monitoring system including a map of monitoring locations is provided in the Noise Monitoring Plan, available on Port Authority's website.

2. Noise monitoring details and vessel schedule

Client	Company details	Noise monitor name	Noise monitor location	Noise monitor details / settings	Noise monitor serial numbers	Monthly calibration variance
Port Authority of New South Wales	GHD Pty Ltd Member of the Association of Australasian Acoustical Consultants (AAAC) Lead staff are Members of the Australian Acoustical Society (AAS)	L01	Grafton Street, Balmain	**Meter details** Norsonic Nor145 Sound Level Meter with Nor1297 Noise Compass **Meter settings** A-weighted Fast time response 15 minute intervals	14529646	**Initial calibration level 90.7 dBA** Min. deviation = 0.1 dB Max. deviation = 0.2 dB
		L02	Maintenance Building on White Bay		14529643	**Initial calibration level 91.9 dBA** Min. deviation = 0.3 dB Max. deviation = 0.3 dB
		L03	Adjacent to White Bay 2		14529645	**Initial calibration level 92.5 dBA** Min. deviation = 0.3 dB Max. deviation = 0.4 dB
		L04	Onsite at Glebe Island		14529640	**Initial calibration level 93.9 dBA** Min. deviation = -0.1 dB Max. deviation = 0.0 dB

Vessel name	Arrival date and time	Departure date and time	Berth location	Applicable noise monitoring location/s
Bulk vessels				
Luga[1]	June 30, 2025 / 03:50	July 03, 2025 / 23:05	GLB8	L03
Pioneer[1]	June 30, 2025 / 11:06	July 03, 2025 / 21:03	GLB7	L03

Vessel name	Arrival date and time	Departure date and time	Berth location	Applicable noise monitoring location/s
Adelie	July 8, 2025 / 06:11	July 9, 2025 / 17:57	GLB7	L03
Luga	July 21, 2025 / 19:05	July 23, 2025 / 06:03	GLB8	L03
Pioneer	July 28, 2025 / 17:20	August 01, 2025 / 07:52	GLB7	L03
Cruise vessel				
Carnival Adventure	July 5, 2025 / 06:31	July 5, 2025 / 15:43	WBCT	L01
Other vessels				
Ocean Titan[2]	July 1, 2025 / 10:54	July 5, 2025 / 07:04	GLB1	N/A[2]

Notes:

1) Results for the Luga and Pioneer are contained in the June report.
2) The berth location, GLB1, is outside the scope of the monitoring program and as such there was insufficient data for this period. The Ocean Titan was present at White Bay 4 during May and are included in the May report. The monitoring completed during the May visit at White Bay 4 has been considered representative.

2.1 Compliance summary

2.2 Bulk vessels / other vessels

Vessel	Dates at berth	Monitor location	Vessel Noise Level, dBA (inclusive of any modifying factor penalties)			Vessel Noise Trigger Levels, dBA			Compliance[1]		
			Day[2] $L_{Aeq(15\ hr)}$	Night[3] $L_{Aeq(1\ hr)}$	Night L_{Amax}	Day[2] $L_{Aeq(15\ hr)}$	Night[3] $L_{Aeq(1\ hr)}$	Night L_{Amax}	Day[2] $L_{Aeq(15\ hr)}$	Night[3] $L_{Aeq(1\ hr)}$	Night L_{Amax}
Bulk vessels											
Adelie	July 08 – July 09	L03	55	55	63	60	55	65	Yes	Yes	Yes
Luga	July 21 – July 23	L03	54	56	62	60	55	65	Yes	No[4]	Yes
Pioneer	July 28 – August 01	L03	56	57[5]	58	60	55	65	Yes	No[5]	Yes

Notes:
1) If non-compliance is detected, a detailed investigation of the results will be undertaken and reported separately if required
2) Daytime period (7 am to 10 pm) – 15 hour logarithmic average
3) Night-time (10 pm to 7 am) – loudest 1 hour period
4) There was a minor exceedance of the night-time vessel noise trigger level for 1 hour between midnight and 1:00 am on July 23. This exceedance occurred for 1 hour only and was compliant at all other times. This impact is not considered significant
5) The system identified that the vessel was tonal at 3,150 Hz for 1 hours between 10:00 pm to 11:00 pm on July 29. The tonal noise was not present at any other time, with all other hours being compliant and the impact is not considered significant.

2.3 Cruise vessels

Vessel	Dates at berth	Monitor location	Vessel Noise Level, dBA (inclusive of any modifying factor penalties)		Vessel Noise Trigger Levels, dBA		Compliance[1]	
			Day[2] $L_{Aeq(15\ hr)}$	Night[3] $L_{Aeq(9\ hr)}$	Day[2] $L_{Aeq(15\ hr)}$	Night[3] $L_{Aeq(9\ hr)}$	Day[5]	Night
Carnival Adventure	July 4[4]	L01	-	56	N/A	58	N/A	Yes
	July 5	L01	59	-	N/A	58	N/A	-

Notes:

1) If non-compliance is detected, a detailed investigation of the results will be undertaken and reported separately if required
2) Daytime period (7 am to 10 pm) – 15 hour logarithmic average
3) Night-time (10 pm to 7 am) – 9 hour logarithmic average
4) The system classifies July 4 as the period from 7 am on July 4 to 7 am on July 5. The Carnival Adventure arrived at 06:31 am on July 5, and has been incorporated in the data for July 4
5) Port Authority provides attenuation to a defined area of residences where noise modelling indicates that current noise levels reach or exceed 55 dBA **at night** ('attenuation eligibility trigger'). Under the White Bay Cruise Terminal Noise Restriction Policy, cruise ship noise which causes further residences than those currently identified to exceed the attenuation eligibility trigger is considered to be Excessive Noise. Hence under the Noise Restriction Policy a day time trigger level does not apply. The area of residences currently offered attenuation (ie meeting the 'attenuation eligibility trigger') is based on a reference cruise vessel intrusive noise level of 58 dBA at the nearest residence, which sets the Vessel Noise Trigger Level for assessing compliance at night.

Excessive noise is defined as "any noise including but not limited to engine, generator or ventilation noise which causes further residences than those currently identified to exceed the attenuation eligibility trigger."

3. Detailed results – bulk vessels / other vessels

3.1 Adelie (GLB7) – July 8 – July 9, 2025

3.1.1 Daily noise monitoring results

Date	Time period[1]	Monitor location	Noise descriptor	Vessel noise level dBA[2]	Tonal	LFN[3]	Vessel Noise Trigger Levels, dBA	Compliance
July 7[4] 2025	Day	L03	$L_{Aeq, 15\ hour}$[1]	-	-	-	60	-
	Night		$L_{Aeq, 1\ hour}$[1]	55[5]	Yes[5]	Yes	55	Yes
			L_{Amax}	56	-	-	65	Yes
July 8 2025	Day	L03	$L_{Aeq, 15\ hour}$[1]	55	No	Yes	60	Yes
	Night		$L_{Aeq, 1\ hour}$[1]	52	No	Yes	55	Yes
			L_{Amax}	63	-	-	65	Yes
July 9 2025	Day	L03	$L_{Aeq, 15\ hour}$[1]	53	No	Yes	60	Yes
	Night		$L_{Aeq, 1\ hour}$[1]	-	-	-	55	-
			L_{Amax}	-	-	-	65	-

Notes

1) Daytime period (7 am to 10 pm) – 15 hours

Night-time period (10 pm to 7 am) – worst case 1 hour

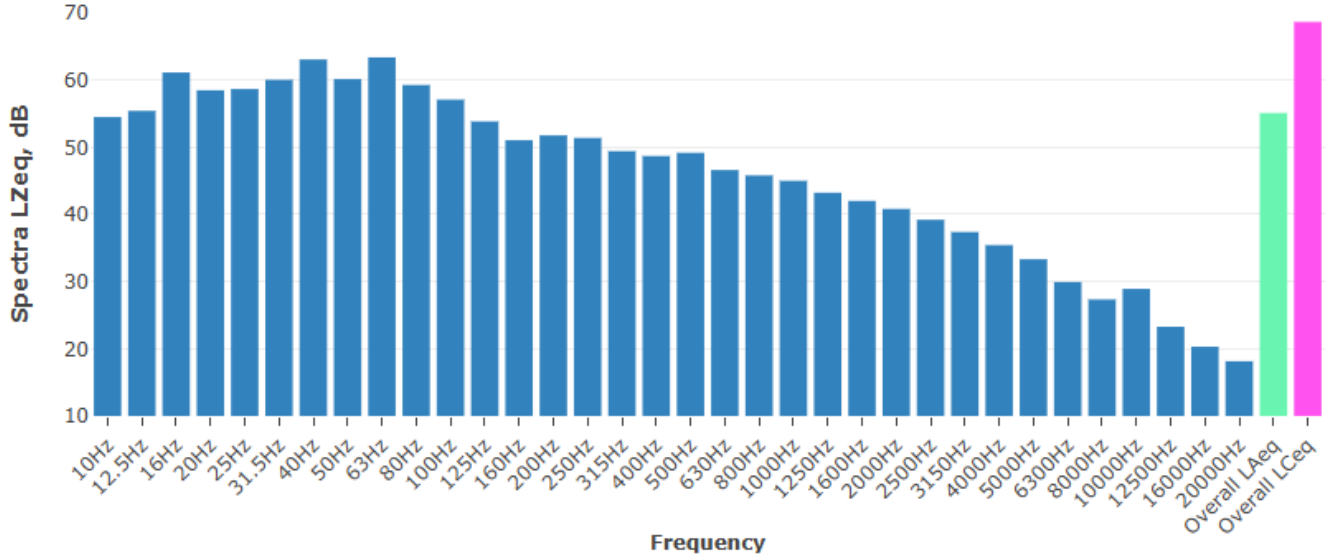
2) Inclusive of any penalties for modifying factors

3) LFN = Low Frequency Noise

4) Note that the system classifies July 7 as the period from 7 am on July 7 to 7 am on July 8. The Adelie arrived at 06:11 am on July 8, and has been incorporated in the data for July 7

5) The system identified that the vessel was tonal at 3,150 Hz between 6:00 am on July 8 to 7:00 am on July 8. The results presented are inclusive of a 5 dB correction in accordance with the EPA's Noise Policy for Industry

3.1.2 Additional information



Note: The overall frequency spectrum can be classified into low (≤160 Hz), medium (160-2000 Hz) and high (≥2000 Hz) frequencies. Where low frequency components are identified in the hourly spectra, the frequency bars are shaded in cyan. Where tones are identified in the hourly spectra, the frequency bars are shaded in red.

Figure 3.1 Typical vessel spectrum – noise level at L03

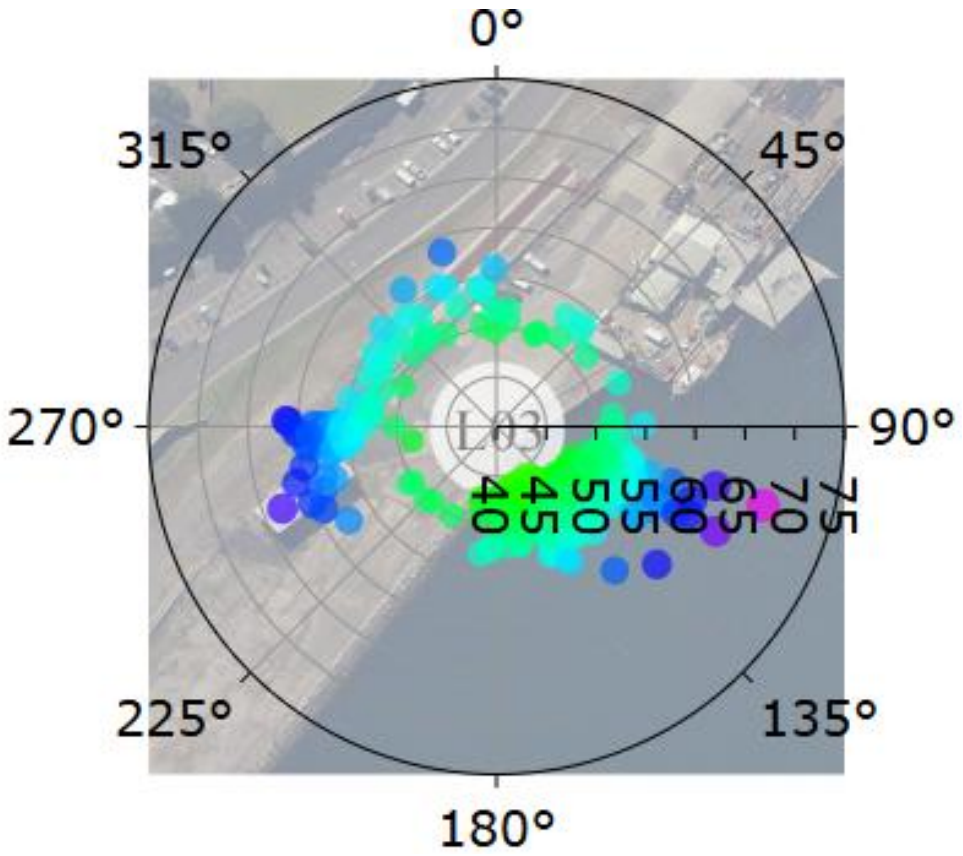


Figure 3.2 Typical vessel polar (directional) plot

3.2 Luga (GLB8) – July 21 – July 23, 2025

3.2.1 Daily noise monitoring results

Date	Time period[1]	Monitor location	Noise descriptor	Vessel noise level dBA[2]	Tonal	LFN[3]	Vessel Noise Trigger Levels, dBA	Compliance
July 21 2025	Day	L03	$L_{Aeq,\ 15\ hour}$[1]	54	No	Yes	60	Yes
	Night		$L_{Aeq,\ 1\ hour}$[1]	54	No	Yes	55	Yes
			L_{Amax}	55	-	-	65	Yes
July 22[4] 2025	Day	L03	$L_{Aeq,\ 15\ hour}$[1]	54	No	Yes	60	Yes
	Night		$L_{Aeq,\ 1\ hour}$[1]	56[5]	No	Yes	55	No[5]
			L_{Amax}	62	-	-	65	Yes

Notes

1) Daytime period (7 am to 10 pm) – 15 hours
Night-time period (10 pm to 7 am) – worst case 1 hour

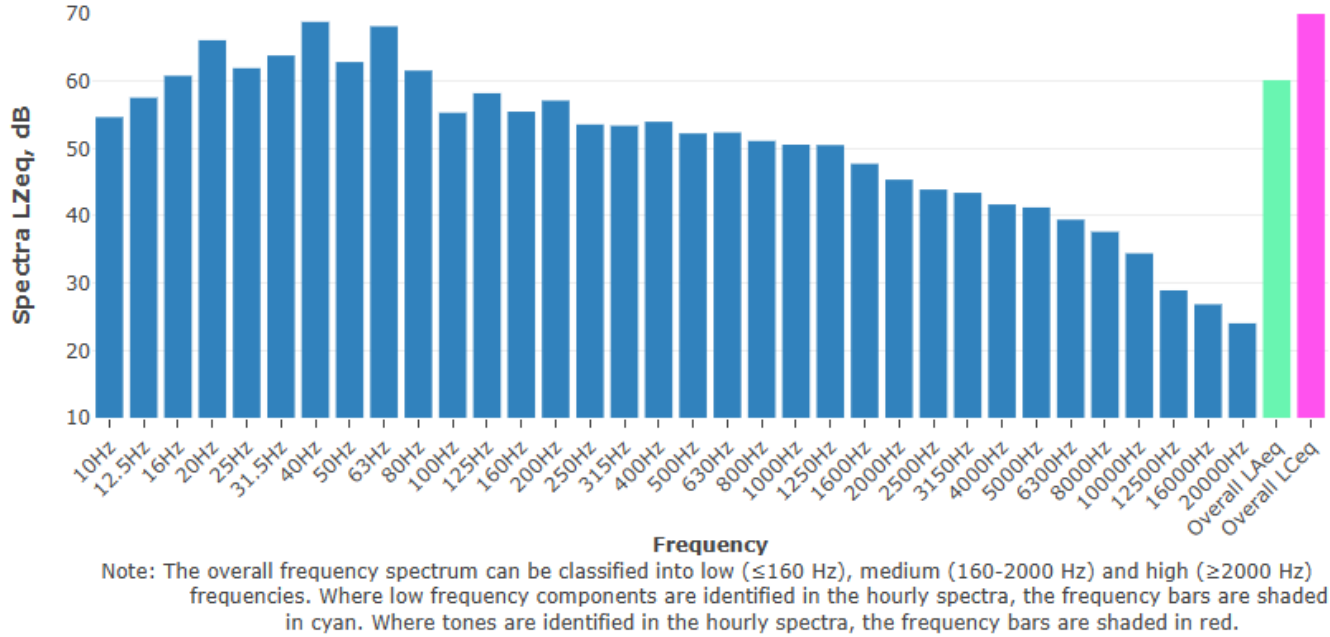
2) Inclusive of any penalties for modifying factors

3) LFN = Low Frequency Noise

4) Note that the system classifies July 22 as the period from 7 am on July 22 to 7 am on July 23. The Luga departed at 06:03 am on July 23, and has been incorporated in the data for July 22

5) There was a minor exceedance of the night-time vessel noise trigger level for 1 hour between midnight and 1:00 am on July 23. This occurred for 1 hour only and was compliant at all other times. This impact is not considered significant.

3.2.2 Additional information



Note: The overall frequency spectrum can be classified into low (≤160 Hz), medium (160-2000 Hz) and high (≥2000 Hz) frequencies. Where low frequency components are identified in the hourly spectra, the frequency bars are shaded in cyan. Where tones are identified in the hourly spectra, the frequency bars are shaded in red.

Figure 3.3 Typical vessel spectrum – noise level at L03

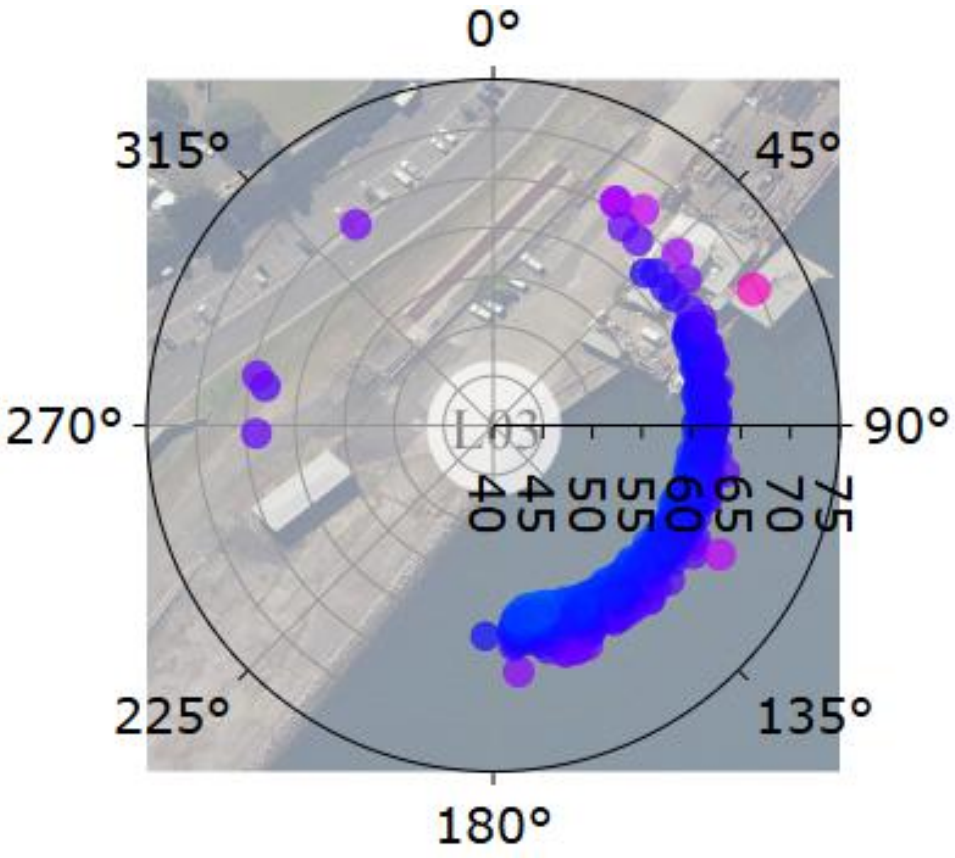


Figure 3.4 Typical vessel polar (directional) plot

3.3 Pioneer (GLB7) – July 28 – August 01, 2025

3.3.1 Daily noise monitoring results

Date	Time period[1]	Monitor location	Noise descriptor	Vessel noise level dBA[2]	Tonal	LFN[3]	Vessel Noise Trigger Levels, dBA	Compliance
July 28 2025	Day	L03	$L_{Aeq, 15\ hour}$[1]	L03 was not operational at this time. Results for the rest of the visit are considered representative.				
	Night		$L_{Aeq, 1\ hour}$[1]	48	Yes	Yes	55	Yes
			L_{Amax}	56	-	-	65	Yes
July 29 2025	Day	L03	$L_{Aeq, 15\ hour}$[1]	52	No	No	60	Yes
	Night		$L_{Aeq, 1\ hour}$[1]	57[4]	Yes	Yes	55	No[4]
			L_{Amax}	57	-	-	65	Yes
July 30 2025	Day	L03	$L_{Aeq, 15\ hour}$[1]	53	No	Yes	60	Yes
	Night		$L_{Aeq, 1\ hour}$[1]	50	-	-	55	Yes
			L_{Amax}	58	-	-	65	Yes
July 31 2025	Day	L03	$L_{Aeq, 15\ hour}$[1]	51	No	Yes	60	Yes
	Night		$L_{Aeq, 1\ hour}$[1]	49	-	-	55	Yes
			L_{Amax}	57	-	-	65	Yes
August 1 2025	Day	L03	$L_{Aeq, 15\ hour}$[1]	56	No	No	60	Yes
	Night		$L_{Aeq, 1\ hour}$[1]	-	-	-	55	-
			L_{Amax}	-	-	-	65	-

Notes

1) Daytime period (7 am to 10 pm) – 15 hours

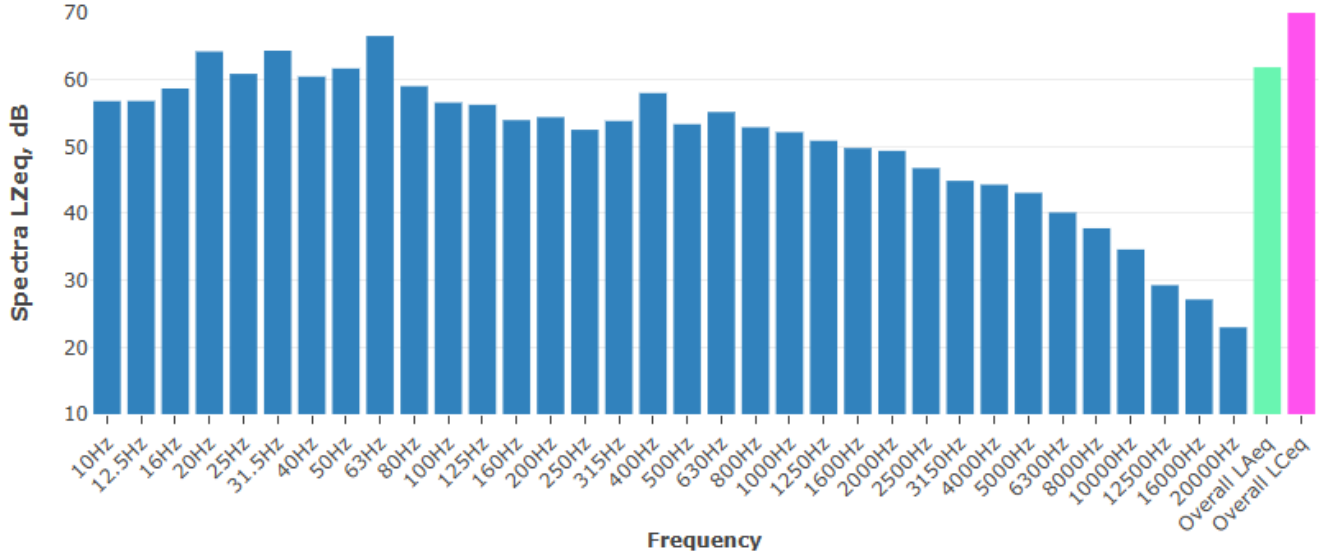
Night-time period (10 pm to 7 am) – worst case 1 hour

2) Inclusive of any penalties for modifying factors

3) LFN = Low Frequency Noise

4) The system identified that the vessel was tonal at 3,150 Hz for 1 hours between 10:00 pm to 11:00 pm on July 29. The tonal noise was not present at any other time, with all other hours being compliant and the impact is not considered significant.

3.3.2 Additional information



Note: The overall frequency spectrum can be classified into low (≤160 Hz), medium (160-2000 Hz) and high (≥2000 Hz) frequencies. Where low frequency components are identified in the hourly spectra, the frequency bars are shaded in cyan. Where tones are identified in the hourly spectra, the frequency bars are shaded in red.

Figure 3.5 Typical vessel spectrum – noise level at L03

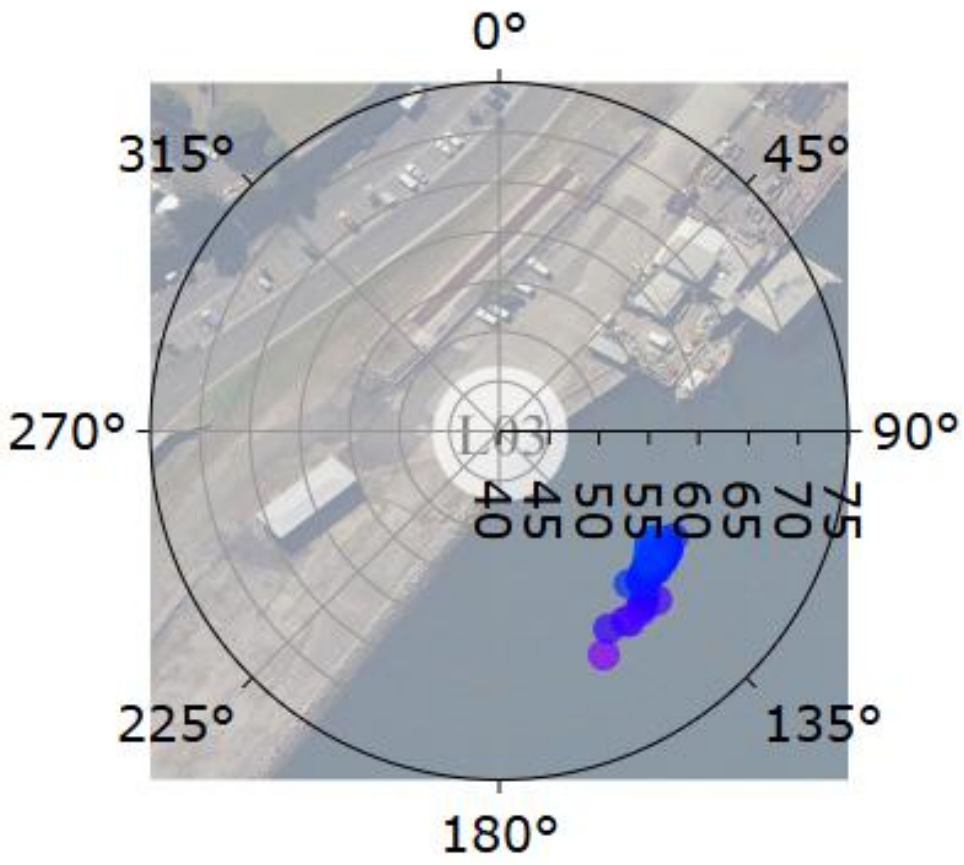


Figure 3.6 Typical vessel polar (directional) plot

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