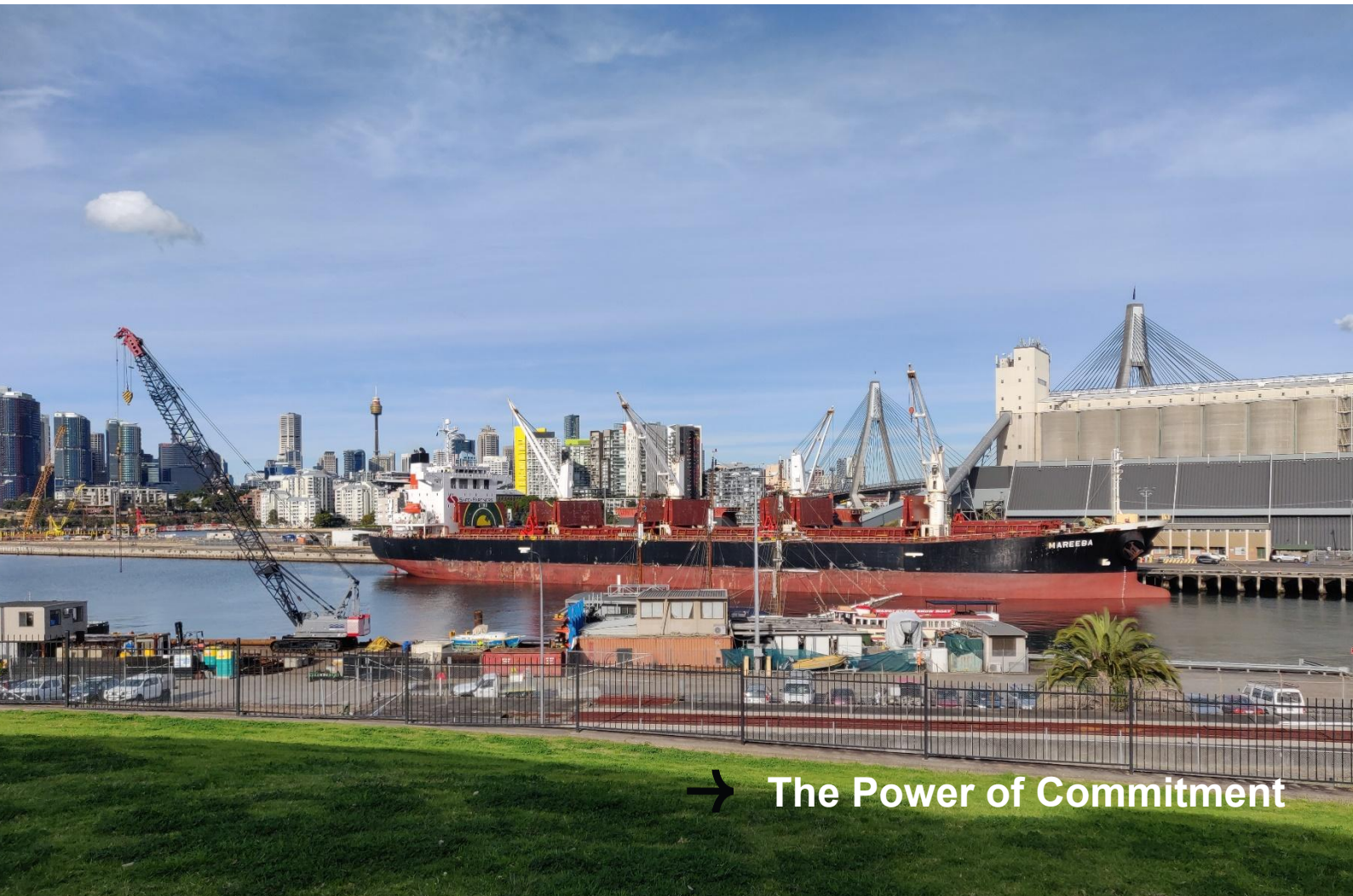
Monthly compliance noise monitoring report

Glebe Island / White Bay

Port Authority of New South Wales

October 2025



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			Name	Signature	Name	Signature	Date
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S4	0	C Gordon	C Doyle		E Milton		18/12/2025

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 October 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	14529642	**Initial calibration level 91.9 dBA** Min. deviation = 0.0 dB Max. deviation = 0.1 dB
		L02	Maintenance Building on White Bay		14529645	**Initial calibration level 91.3 dBA** Min. deviation = 0.0 dB Max. deviation = 0.1 dB
		L03	Adjacent to White Bay 2		14529644	**Initial calibration level 92.9 dBA** Min. deviation = 0.0 dB Max. deviation = 0.1 dB
		L04	Onsite at Glebe Island		14529646	**Initial calibration level 94.3 dBA** Min. deviation = 0.0 dB Max. deviation = 0.1 dB

Vessel name	Arrival date and time	Departure date and time	Berth location	Applicable noise monitoring location/s
Bulk vessels				
Pioneer	September 29, 2025 / 12:37	October 3, 2025 / 11:00	GLB7	L03
Luga	October 3, 2025 / 14:32	October 6, 2025 / 05:38	GLB8	L03

Vessel name	Arrival date and time	Departure date and time	Berth location	Applicable noise monitoring location/s
CSL Reliance[1]	October 22, 2025 / 03:14	October 26, 2025 / 18:14	GLB7	L03
Cruise vessel				
Carnival Adventure	October 09, 2025 / 06:37	October 09, 2025 / 15:36	WBCT	L01
Silver Nova	October 11, 2025 / 08:30	October 12, 2025 / 13:00	WBCT	L01
Carnival Adventure	October 17, 2025 / 05:13	October 17, 2025 / 15:32	WBCT	L01
Silver Nova	October 17, 2025 / 13:08	October 18, 2025 / 22:56	WHT4	L02
Disney Wonder	October 18, 2025 / 22:15	October 19, 2025 / 18:57	WBCT	L01
Carnival Adventure	October 20, 2025 / 04:50	October 20, 2025 / 15:54	WBCT	L01
Disney Wonder	October 24, 2025 / 05:18	October 24, 2025 / 18:37	WBCT	L01
Other vessel				
Chipolbrok Star[2]	October 21, 2025 / 12:20	November 01, 2025 / 14:35	GLB2	Attended
Hansa Homburg[3]	October 30, 2025 / 05:47	December 07, 2025 / 14:03	WHT4/GLB1	L01/L02/Attended

Notes:

1) A movement of CSL Reliance was recorded at 06:46 on 25/10/2025, but the vessel did not leave GLB7
2) Results from the attended noise monitoring will be presented in a specific report
3) Results will be presented in the November monthly report. Also, results from the attended noise monitoring will be presented in a specific report.

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											
Pioneer	Sep 29 – Oct 3	L03	54	56[4]	71[5]	60	55	65	Yes	No[4]	No[5]
Luga	Oct 3 – Oct 6	L03	55	57[6]	63	60	55	65	Yes	No[6]	Yes
CSL Reliance	Oct 22 – Oct 26	L03	53	55	64	60	55	65	Yes	Yes	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) Measurements determined that noise was tonal at 200 Hz for a 1 hour period during this night time period. It is likely that the increase at 200 Hz for a short period was related to the vessel. Given the short duration, it is unlikely this would result in an adverse impact
5) There were 4 maximum noise level events within 10 seconds at 5:24 am on October 3. These were from the general direction of the vessel
6) There was an increase of noise from the vessel for approximately 45 minutes, approximately 1 hour prior to departure. The vessel was compliant at all other times.

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	Oct 8	L01	-	54	N/A	58	N/A	Yes
	Oct 9[4]	L01	58	-	N/A	58	N/A	-
Silver Nova	Oct 11	L01	54	52	N/A	58	N/A	Yes
	Oct 12	L01	55	-	N/A	58	N/A	-
Carnival Adventure	Oct 16[5]	L01	-	51	N/A	58	N/A	Yes
	Oct 17	L01	58	-	N/A	58	N/A	-
Silver Nova	Oct 17	L02	52	52	N/A	58	N/A	Yes
	Oct 18	L02	51	-	N/A	58	N/A	-
Disney Wonder	18 Oct	L01	52	52	N/A	58	N/A	Yes
	19 Oct	L01	55	-	N/A	58	N/A	-
Carnival Adventure	19 Oct[6]	L01	-	53	N/A	58	N/A	Yes
	20 Oct	L01	58	-	N/A	58	N/A	-
Disney Wonder	23 Oct[7]	L01	-	52	N/A	58	N/A	Yes
	24 Oct	L01	58	-	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 October 8 as the period from 7 am on October 8 to 7 am on October 9. The Carnival Adventure arrived at 06:37 am on October 9, and has been incorporated in the data for October 8.
5) The system classifies October 16 as the period from 7 am on October 16 to 7 am on October 17. The Carnival Adventure arrived at 05:13 am on October 17, and has been incorporated in the data for October 16.
6) The system classifies October 19 as the period from 7 am on October 19 to 7 am on October 20. The Carnival Adventure arrived at 04:50 am on October 20, and has been incorporated in the data for October 19.
7) The system classifies October 23 as the period from 7 am on October 23 to 7 am on October 24. The Carnival Adventure arrived at 05:18 am on October 24, and has been incorporated in the data for October 23.

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 Pioneer (GLB7) – September 29 – October 3, 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
September 29 2025	Day	L03	$L_{Aeq,\ 15\ hour}$[1]	51	No	No	60	Yes
	Night		$L_{Aeq,\ 1\ hour}$[1]	50	No	No	55	Yes
			L_{Amax}	59	-	-	65	Yes
September 30 2025	Day	L03	$L_{Aeq,\ 15\ hour}$[1]	51	No	Yes	60	Yes
	Night		$L_{Aeq,\ 1\ hour}$[1]	56[4]	No[4]	Yes	55	No[4]
			L_{Amax}	58	-	-	65	Yes
October 1 2025	Day	L03	$L_{Aeq,\ 15\ hour}$[1]	52	No	No	60	Yes
	Night		$L_{Aeq,\ 1\ hour}$[1]	50[5]	No[5]	No	55	Yes
			L_{Amax}	57	-	-	65	Yes
October 2 2025	Day	L03	$L_{Aeq,\ 15\ hour}$[1]	51	No	Yes	60	Yes
	Night		$L_{Aeq,\ 1\ hour}$[1]	51	No	Yes	55	Yes
			L_{Amax}	71[6]	-	-	65	No[6]
October 3 2025	Day	L03	$L_{Aeq,\ 15\ hour}$[1]	54	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

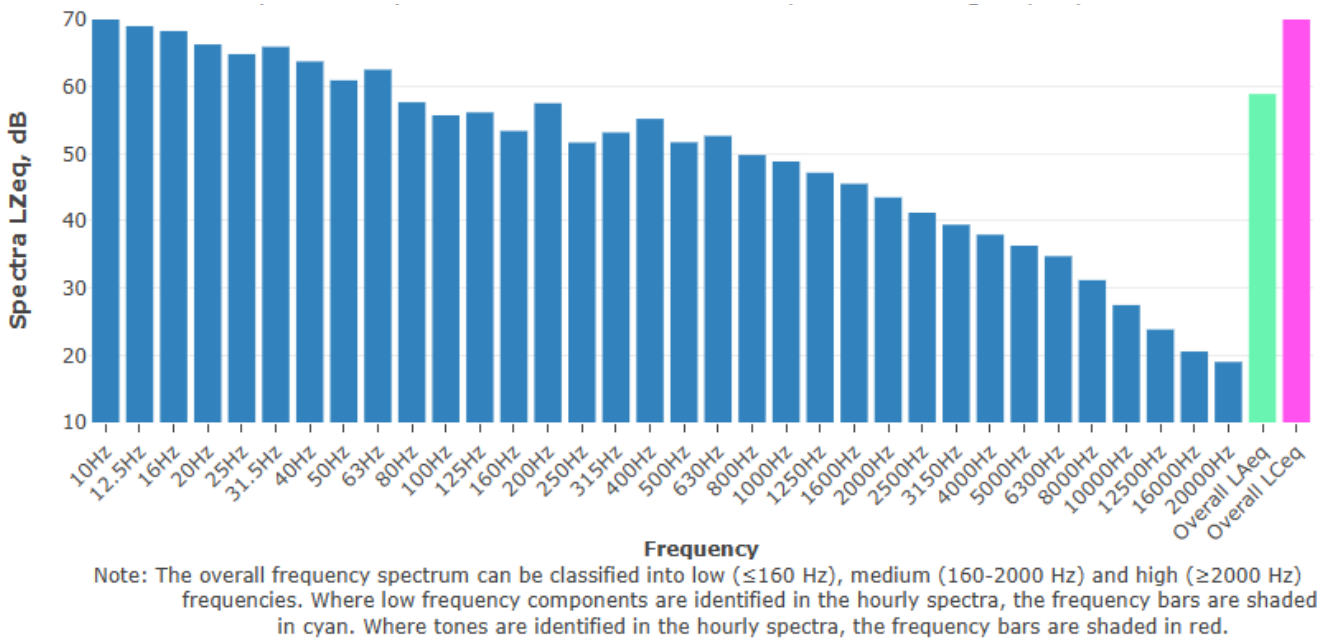
3) LFN = Low Frequency Noise

4) Measurements determined that noise was tonal at 200 Hz for a 1 hour period during this night time period. It is likely that the increase at 200 Hz for a short period was related to the vessel. Given the short duration, it is unlikely this would result in an adverse impact.

5) Measurements determined that noise was tonal at 6,300 Hz for periods during this night time period. A further review into the data determined that this was likely associated with extraneous noise in the area rather than the vessel. As such, no tonal correction has been applied.

6) There were 4 maximum noise level events within 10 seconds at 5:24 am on October 3. These were from the general direction of the vessel. The system classifies October 2 as the period from 7 am on October 2 to 7 am on October 3. Therefore, the results were incorporated in the data for October 2

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

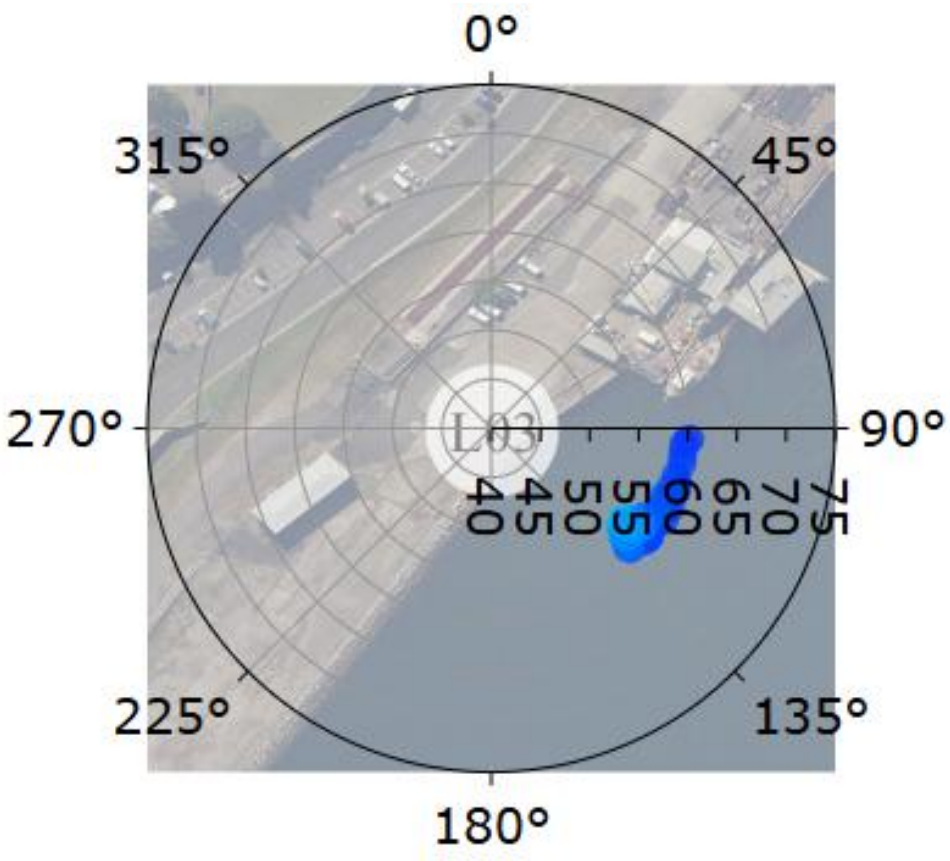


Figure 3.2 Typical vessel polar (directional) plot

3.2 Luga (GLB8) – October 3 – October 6, 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
October 3 2025	Day	L03	$L_{Aeq,\ 15\ hour}$[1]	55	No	Yes	60	Yes
	Night		$L_{Aeq,\ 1\ hour}$[1]	55	No	Yes	55	Yes
			L_{Amax}	63	-	-	65	Yes
October 4 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}	63	-	-	65	Yes
October 5 2025[5]	Day	L03	$L_{Aeq,\ 15\ hour}$[1]	54	No	Yes	60	Yes
	Night		$L_{Aeq,\ 1\ hour}$[1]	57[4]	No	Yes	55	No[4]
			L_{Amax}	60	-	-	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

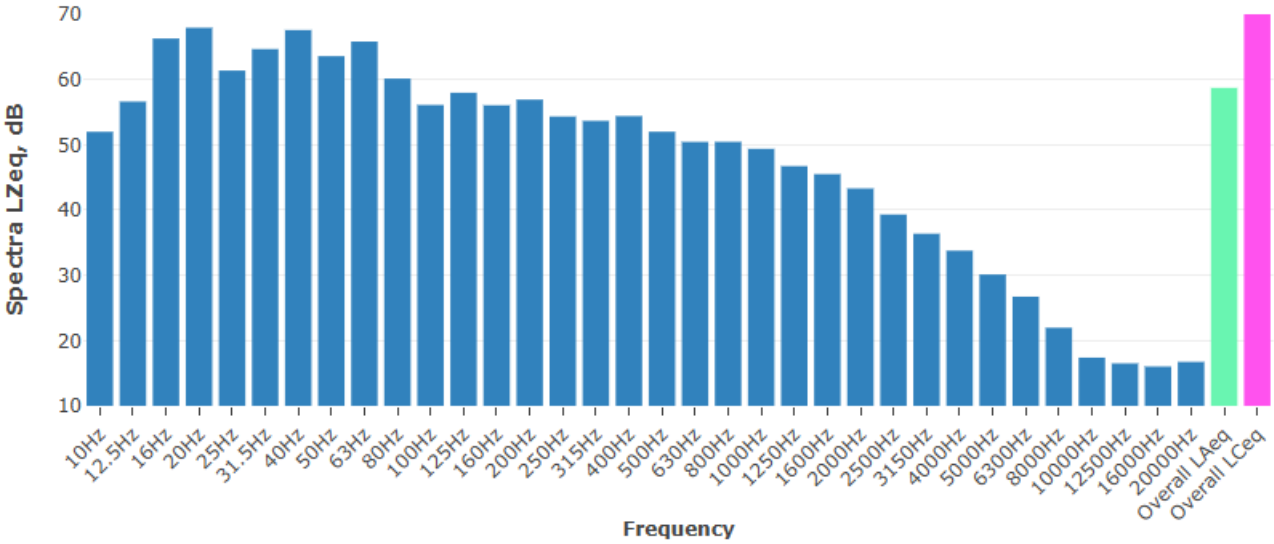
2) Inclusive of any penalties for modifying factors

3) LFN = Low Frequency Noise

4) There was an increase of noise from the vessel for approximately 45 minutes, approximately 1 hour prior to departure. The vessel was compliant at all other times.

5) The system classifies October 5 as the period from 7 am on October 5 to 7 am on October 6. The Luga departed at 05:38 am on October 6, and has been incorporated in the data for October 5

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

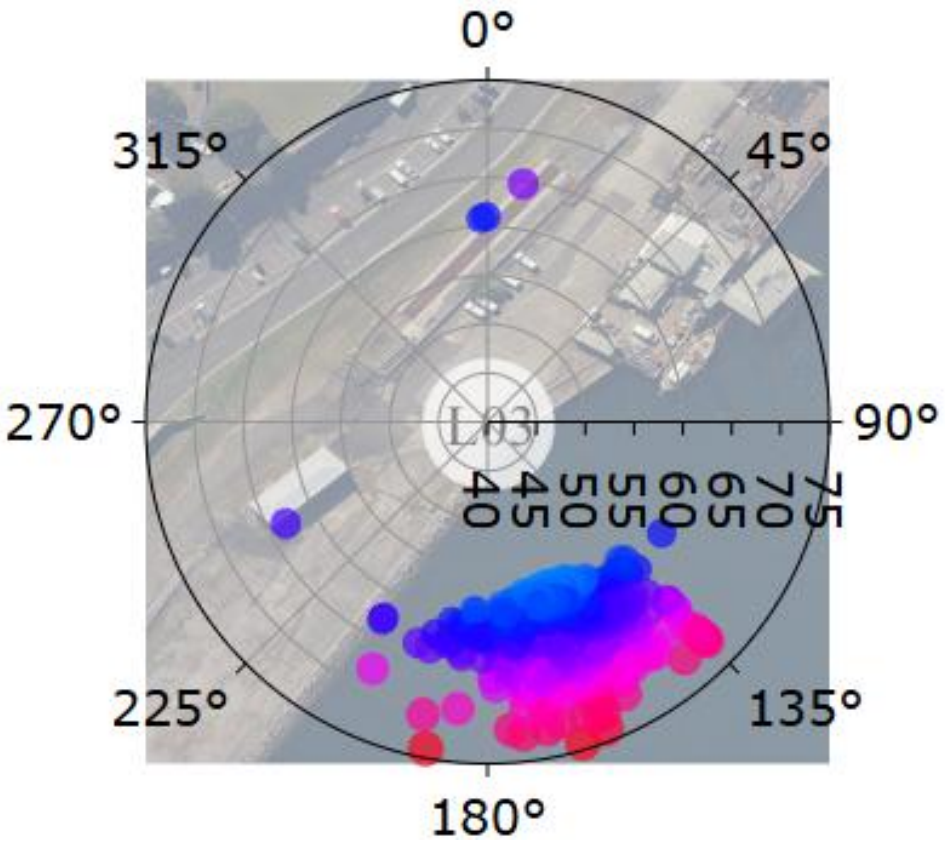


Figure 3.4 Typical vessel polar (directional) plot

3.3 CSL Reliance (GLB7) – October 22 – October 26, 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
October 21 2025[4]	Day	L03	$L_{Aeq,\ 15\ hour}$[1]	-	No	Yes	60	-
	Night		$L_{Aeq,\ 1\ hour}$[1]	51	No	Yes	55	Yes
			L_{Amax}	61	-	-	65	Yes
October 22 2025	Day	L03	$L_{Aeq,\ 15\ hour}$[1]	53	No	Yes	60	Yes
	Night		$L_{Aeq,\ 1\ hour}$[1]	51	No	Yes	55	Yes
			L_{Amax}	65	-	-	65	Yes
October 23 2025	Day	L03	$L_{Aeq,\ 15\ hour}$[1]	53	No	Yes	60	Yes
	Night		$L_{Aeq,\ 1\ hour}$[1]	52	Yes[5]	Yes	55	Yes
			L_{Amax}	64	-	-	65	Yes
October 24 2025	Day	L03	$L_{Aeq,\ 15\ hour}$[1]	52	No	Yes	60	Yes
	Night		$L_{Aeq,\ 1\ hour}$[1]	55[6]	Yes[6]	Yes	55	Yes
			L_{Amax}	60[7]	-	-	65	Yes
October 25 2025	Day	L03	$L_{Aeq,\ 15\ hour}$[1]	51	No	Yes	60	Yes
	Night		$L_{Aeq,\ 1\ hour}$[1]	50	No	Yes	55	Yes
			L_{Amax}	60	-	-	65	Yes
October 26 2025	Day	L03	$L_{Aeq,\ 15\ hour}$[1]	49	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

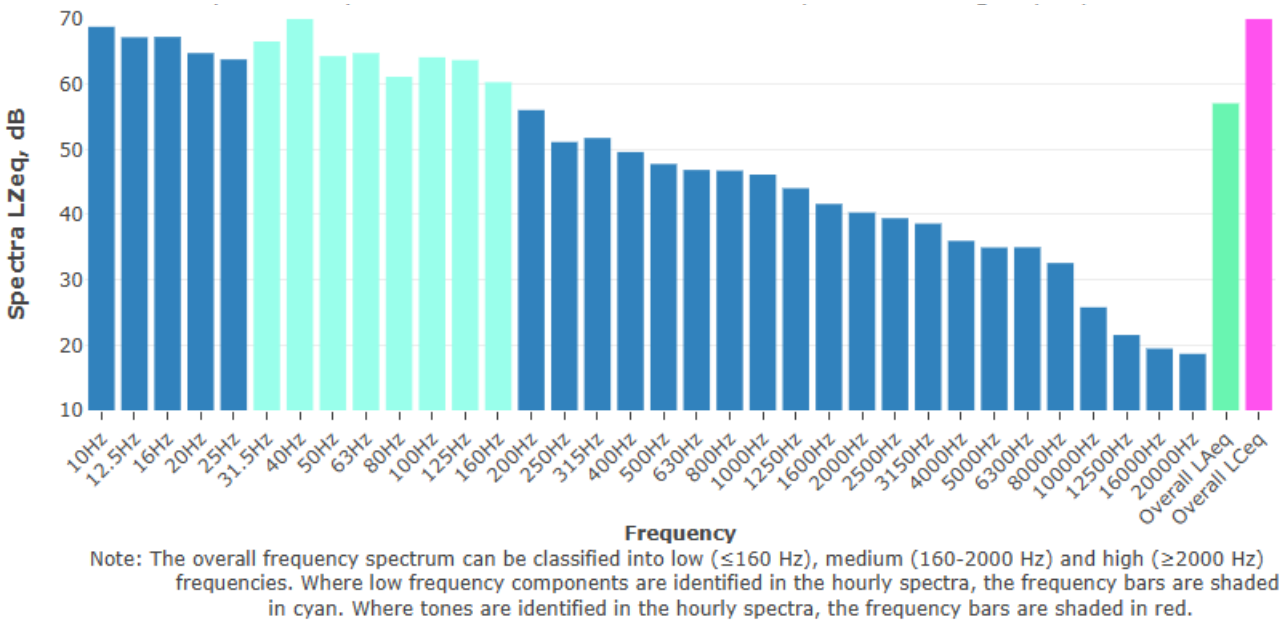
4) The system classifies October 21 as the period from 7 am on October 21 to 7 am on October 22. The CSL Reliance arrived at 03:14 am on October 22, and has been incorporated in the data for October 21

5) Measurements determined that noise was tonal at 6,300 Hz for periods during this night time period. A further review into the data determined that this was likely associated with extraneous noise in the area rather than the vessel. As such, no tonal correction has been applied

6) The system identified a tonal noise at 4000 Hz. A review of the data indicates that this was influenced by a loud event near the monitor and was not associated with the vessel. No correction has been applied.

7) There were 3 maximum noise level events above 65 dBA which occurred at 6:24 am, however this coincided with the Svitzer Waratah tug pulling up next to the CSL Reliance.

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

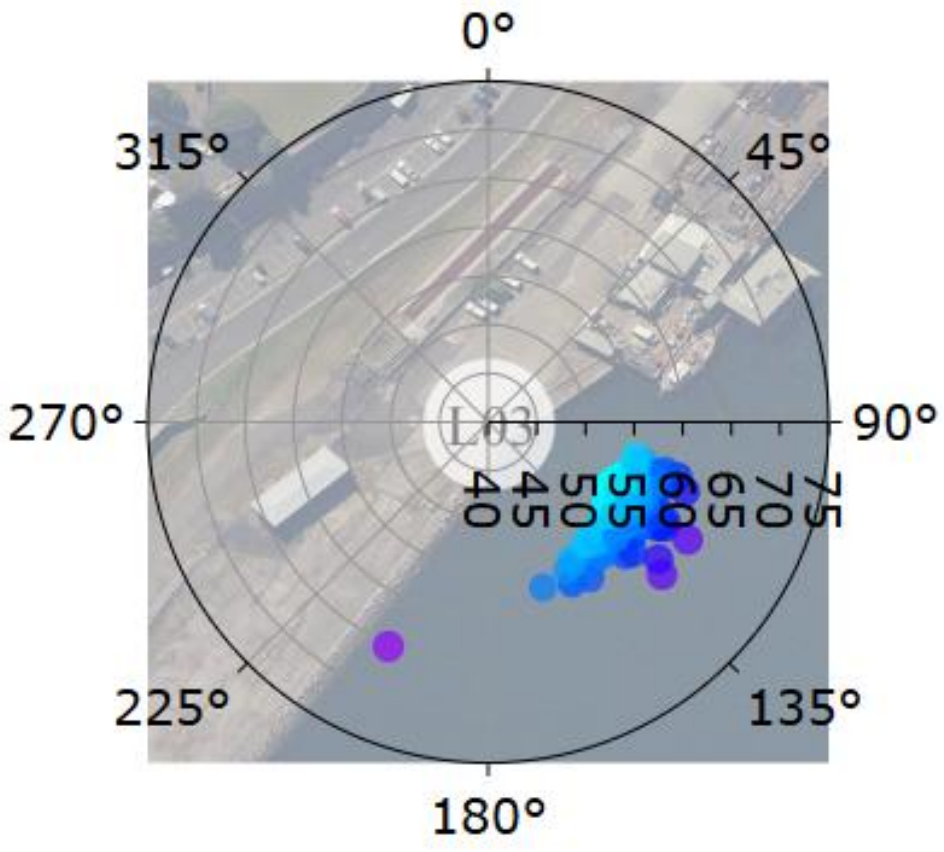


Figure 3.6 Typical vessel polar (directional) plot

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