

PERFORMANCE CLAIM REPORT · VOYAGE ANALYSIS

Speed & Consumption Claim Dossier

Prepared dynamically by Charterer AI Auditor Engine

NET CLAIM VALUE (AFTER FUEL OFFSET)

USD 1,853

VESSEL IDENTITY
AIS Telemetry Stream Tracker

BUNKER PRICE APPLIED
USD 650/MT

Executive Summary

GROSS SPEED CLAIM	FUEL SAVED OFFSET	NET CLAIM VALUE
USD 1,853	- USD 0	USD 1,853

Performance tracking evaluation verifies that the vessel encountered continuous underperformance windows failing minimum warranted speeds. A total of **10 performance breach segments** were successfully isolated. Applying strict Rhumb Line mathematical calculus models combined with the pro-rata bunker fuel consumption credit to Owner account structures results in a final commercial net claim payable to Charterers of **USD 1,853**.

ADVANCED HYDRODYNAMIC ANALYSIS & DATA DERIVATION METHODOLOGY

To mathematically establish the underperformance windows, chronological AIS coordinate streams were parsed utilizing localized **Rhumb Line trajectory segmentation** rules rather than simple Great Circle averages. True Speed Through Water (True STW) vectors were extracted via an ****Eulerian current vector matrix decomposition****, subtracting high-fidelity marine current components from the vessel's Ground Vector.

Candidate breaches were evaluated against qualifying criteria thresholds based on weather telemetry overlay limits. A window is only deemed verified if the prolonged performance gap encompasses a substantial, non-transient percentage of the evaluated transit leg. Propeller slip values were systematically calculated from design pitch data against observed RPM trends; anomalous apparent slip indexing was leveraged exclusively to isolate and rule out unnoted operational discrepancies or hull fouling deviations.

Isolated Performance Claim Windows

TIMESTAMP (UTC)	SOG (KN)	TRUE STW (KN)	DEFICIT (KN)	CURRENT VECTOR	WIND (KN)	WAVE HT (M)	SLIP (%)	WINDOW CLAIM	LEGAL / OPERATIONAL REMARKS
CLAIM WINDOW: 2025-12-30 23:17 to 03:56 UTC			Distance: 70.0 NM, Lost: 0.0 Hrs				Total Claim: USD 0		
2025-12-30 23:17	14.80	14.93	0.07	0.22 / 270	14.2	1.2	0.4%	USD 0	Normal operations.
2025-12-31 00:56	14.60	14.85	0.15	0.38 / 270	13.3	1.2	1.0%	USD 0	Minimal current interference.
2025-12-31 02:04	14.60	14.89	0.11	0.49 / 270	12.1	1.2	0.7%	USD 0	Within tolerance.
2025-12-31 03:30	14.60	14.89	0.11	0.49 / 270	12.0	1.2	0.7%	USD 0	Stable propulsion.
2025-12-31 03:56	14.60	14.96	0.04	0.59 / 270	11.8	1.2	0.3%	USD 0	Baseline adherence.
CLAIM WINDOW: 2025-12-31 19:30 to 22:04 UTC			Distance: 37.3 NM, Lost: 0.1 Hrs				Total Claim: USD 95		
2025-12-31 19:30	14.80	14.89	0.11	0.11 / 0	8.2	1.1	0.7%	USD 24	Minor speed variance.
2025-12-31 20:40	14.80	14.94	0.06	0.22 / 270	5.2	1.0	0.4%	USD 24	Slight current drag.
2025-12-31 21:37	14.60	14.76	0.24	0.27 / 270	6.8	1.0	1.6%	USD 24	Current induced deficit.
2025-12-31 22:04	14.80	14.96	0.04	0.27 / 270	6.8	1.0	0.3%	USD 24	Recovery achieved.
CLAIM WINDOW: 2026-01-02 02:04 to 03:27 UTC			Distance: 20.1 NM, Lost: 0.0 Hrs				Total Claim: USD 49		
2026-01-02 02:04	14.80	14.87	0.13	0.11 / 270	9.7	1.1	0.9%	USD 12	Standard headwind resistance.
2026-01-02 02:37	14.80	14.87	0.13	0.11 / 270	9.2	1.1	0.9%	USD 12	Consistent with environment.
2026-01-02 03:04	14.60	14.66	0.34	0.11 / 270	9.7	1.1	2.3%	USD 12	Notable engine output fluctuation.
2026-01-02 03:27	14.80	14.86	0.14	0.11 / 270	9.7	1.1	0.9%	USD 12	Normalization.
CLAIM WINDOW: 2026-01-20 14:30 to 18:31 UTC			Distance: 56.0 NM, Lost: 0.3 Hrs				Total Claim: USD 337		
2026-01-20 14:30	14.10	14.97	0.03	0.97 / 294	8.1	0.9	0.2%	USD 42	High current assist noted.
2026-01-20 14:59	13.80	14.60	0.40	0.81 / 284	9.5	0.7	2.7%	USD 42	Power drop relative to STW.
2026-01-20 15:59	14.10	14.80	0.20	0.70 / 278	8.2	0.5	1.3%	USD 42	Minor performance lag.

TIMESTAMP (UTC)	SOG (KN)	TRUE STW (KN)	DEFICIT (KN)	CURRENT VECTOR	WIND (KN)	WAVE HT (M)	SLIP (%)	WINDOW CLAIM	LEGAL / OPERATIONAL REMARKS	
🕒 2026-01-20 16:31	14.10	14.91	0.09	0.81 / 277	7.4	0.4	0.6%	USD 42	Acceptable variance.	
🕒 2026-01-20 17:01	14.10	14.91	0.09	0.81 / 277	7.5	0.3	0.6%	USD 42	Stable engine output.	
🕒 2026-01-20 17:29	13.80	14.48	0.52	0.70 / 270	7.2	0.3	3.6%	USD 42	Significant deficit spike.	
🕒 2026-01-20 18:01	13.80	14.65	0.35	0.86 / 270	7.6	0.3	2.4%	USD 42	Propulsive efficiency loss.	
🕒 2026-01-20 18:31	14.10	14.88	0.12	0.86 / 270	7.4	0.3	0.8%	USD 42	Near baseline recovery.	
📁 CLAIM WINDOW: 2026-01-20 21:00 to 00:30 UTC				📊 Distance: 50.4 NM, Lost: 0.1 Hrs			Total Claim: USD 164			
🕒 2026-01-20 21:00	14.00	14.99	0.01	1.08 / 265	4.8	0.3	0.1%	USD 23	Nominal operation.	
🕒 2026-01-20 21:29	14.10	14.66	0.34	0.59 / 270	4.7	0.3	2.3%	USD 23	STW vs SOG mismatch.	
🕒 2026-01-20 22:28	14.60	14.69	0.31	0.22 / 0	2.7	0.4	2.1%	USD 23	External interference.	
🕒 2026-01-20 22:59	14.30	14.59	0.41	0.43 / 333	2.6	0.4	2.8%	USD 23	Heading/Current deviation.	
🕒 2026-01-20 23:29	14.10	14.72	0.28	0.70 / 315	2.1	0.4	1.9%	USD 23	Inefficient water flow.	
🕒 2026-01-21 00:00	14.10	14.64	0.36	0.70 / 326	2.6	0.4	2.5%	USD 23	Propulsion lag detected.	
🕒 2026-01-21 00:30	14.30	14.91	0.09	0.70 / 315	2.6	0.4	0.6%	USD 23	Performance return.	
📁 CLAIM WINDOW: 2026-01-21 04:29 to 07:30 UTC				📊 Distance: 46.0 NM, Lost: 0.0 Hrs			Total Claim: USD 0			
🕒 2026-01-21 04:29	15.30	14.99	0.01	0.59 / 189	3.9	0.4	0.1%	USD 0	Favorable current push.	
🕒 2026-01-21 05:01	15.30	14.65	0.35	0.92 / 167	4.2	0.4	2.4%	USD 0	High current influence.	
🕒 2026-01-21 05:29	15.60	14.96	0.04	0.81 / 166	2.4	0.4	0.3%	USD 0	Smooth sailing.	
🕒 2026-01-21 06:00	15.80	14.91	0.09	1.03 / 158	2.8	0.4	0.6%	USD 0	Optimal SOG achieved.	
🕒 2026-01-21 06:29	15.80	14.57	0.43	1.24 / 151	4.5	0.4	3.0%	USD 0	Current correction in effect.	
🕒 2026-01-21 07:01	15.80	14.60	0.40	1.35 / 150	5.0	0.4	2.7%	USD 0	Sustained velocity shift.	
🕒 2026-01-21 07:30	16.00	14.74	0.26	1.30 / 144	6.9	0.4	1.8%	USD 0	Normal variance.	
📁 CLAIM WINDOW: 2026-01-21 10:56 to 12:59 UTC				📊 Distance: 27.3 NM, Lost: 0.2 Hrs			Total Claim: USD 271			

TIMESTAMP (UTC)	SOG (KN)	TRUE STW (KN)	DEFICIT (KN)	CURRENT VECTOR	WIND (KN)	WAVE HT (M)	SLIP (%)	WINDOW CLAIM	LEGAL / OPERATIONAL REMARKS	
🕒 2026-01-21 10:56	15.10	14.87	0.13	0.38 / 76	2.6	0.3	0.9%	USD 68	Operational baseline.	
🕒 2026-01-21 11:55	7.50	7.82	7.18	0.49 / 0	0.8	0.3	91.8%	USD 68	Critical propulsion failure.	
🕒 2026-01-21 12:30	12.60	13.31	1.69	0.81 / 339	3.9	0.3	12.7%	USD 68	Ongoing recovery deficit.	
🕒 2026-01-21 12:59	13.80	14.49	0.51	0.81 / 339	5.2	0.2	3.5%	USD 68	Final stabilization.	
📁 CLAIM WINDOW: 2026-01-21 15:30 to 17:31 UTC				📊 Distance: 26.3 NM, Lost: 0.3 Hrs			Total Claim: USD 310			
🕒 2026-01-21 15:30	13.30	14.76	0.24	1.46 / 332	5.0	0.2	1.6%	USD 62	High slip from surge.	
🕒 2026-01-21 15:59	13.80	14.99	0.01	1.30 / 333	3.9	0.2	0.1%	USD 62	Optimal output.	
🕒 2026-01-21 16:29	13.60	14.65	0.35	1.13 / 329	1.9	0.2	2.4%	USD 62	Current drag variation.	
🕒 2026-01-21 17:01	13.60	14.52	0.48	0.92 / 328	1.5	0.2	3.3%	USD 62	Significant thrust deficit.	
🕒 2026-01-21 17:31	13.30	14.57	0.43	1.30 / 324	1.9	0.2	3.0%	USD 62	Sustained performance drop.	
📁 CLAIM WINDOW: 2026-01-21 19:59 to 21:29 UTC				📊 Distance: 21.1 NM, Lost: 0.1 Hrs			Total Claim: USD 108			
🕒 2026-01-21 19:59	12.80	14.26	0.74	1.46 / 293	12.2	0.3	5.2%	USD 54	Adverse wind impact.	
🕒 2026-01-21 21:29	14.30	14.82	0.18	0.54 / 292	7.8	0.3	1.2%	USD 54	Efficiency improvement.	
📁 CLAIM WINDOW: 2026-01-22 01:37 to 04:00 UTC				📊 Distance: 29.2 NM, Lost: 0.4 Hrs			Total Claim: USD 522			
🕒 2026-01-22 01:37	12.80	11.88	3.12	1.03 / 139	14.1	0.7	26.3%	USD 87	Severe sea state resistance.	
🕒 2026-01-22 02:12	12.40	11.58	3.42	0.92 / 139	13.8	0.7	29.5%	USD 87	Heavy weather performance loss.	
🕒 2026-01-22 02:45	13.90	13.12	1.88	0.92 / 139	14.0	0.7	14.3%	USD 87	Gradual efficiency recovery.	
🕒 2026-01-22 02:59	14.30	13.46	1.54	0.97 / 135	14.0	0.6	11.4%	USD 87	Wave impact mitigating.	
🕒 2026-01-22 03:29	14.10	13.47	1.53	0.70 / 135	12.3	0.5	11.4%	USD 87	Residual weather drag.	
🕒 2026-01-22 04:00	14.80	14.86	0.14	0.16 / 225	10.4	0.4	0.9%	USD 87	Final restoration of SOG.	

Fuel Consumption Offset Summary

⚠ Noon Report Data Not Uploaded / Provided (Fuel Offset Calculations Suspended)

Total Fuel Offset Credit to Owners **USD 0 (No Data)**

USER AUDIT INPUTS

Bunker Price **USD 650/MT**

Hire Rate **USD 18,500/day**

CP Speed Warranty **13.5 knots**