

Northstar sealed file - fueleu-attestation

Sealed file: attestation_9810008.sealed.json

Format: northstar.fueleu-attestation

Made by: fueleu-surplus-witness 0.1.0

Sealed: 2026-10-24T14:53:35Z

Signed by (Ed25519): c70da006d6a083560a4fccdee8b820ba1bc70292baa4308dbaf9625171b101fe

SHA-256 of the sealed body: 3b95c6805621f918fc92ab14f4eb568bb1d1b107f0c7a3562a74efe565ed676c

Seal checked when this PDF was made: VALID

Inputs attached: 9 of 9 match the hashes in the sealed file

Attached: attestation_9810008.sealed.json, bunkers.csv, case.json, certificates.csv, consumption.csv, pools.csv, pos.csv, report.csv, ships.csv, voyages.csv

To check: drop this PDF into the Northstar file checker (northstar-verify), or run

python nsio.py extract THIS.pdf --out DIR and the product's verify_*.py on the files.

These pages are for reading. The attached sealed file is what is verified. SIMULATED DATA.

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FUELEU SURPLUS ATTESTATION - Nordvik Crest (IMO 9810008), 2026, Nordvik Shipping AS - SIMULATED DATA
Licence: evaluation.

EVALUATION COPY - NOT FOR RELIANCE. RESOLVE BEFORE RELYING: Nordvik Crest (IMO 9810008), 2026.

Registered +1,944.1 t CO2eq; recalculated +1,944.1 t; documented +1,944.1 t. 9 bio bunkers (911 t), 9 counted as biofuel. Resolve: F18 more surplus registered or pooled than the ship has; F20 pool not valid. Pool P-2026-01: gives 2,925.8 t CO2eq, keeps -216.3 t; POOL NOT VALID.

booked	energy	207,345,400 MJ	GHGIE	79.961	balance	1,944.1 t CO2eq	(530.8 t VLSFO-eq)
	bio 16.2 % of energy						
recalculated	energy	207,345,400 MJ	GHGIE	79.961	balance	1,944.1 t CO2eq	(530.8 t VLSFO-eq)
	bio 16.2 % of energy						
documented	energy	207,345,400 MJ	GHGIE	79.961	balance	1,944.1 t CO2eq	(530.8 t VLSFO-eq)
	bio 16.2 % of energy						

Bio bunkers:

BDN-001-0110	FAME	112.9 t	E	20.7	PoS-001-0009	biofuel
BDN-001-0112	FAME	107.6 t	E	16.5	PoS-001-0010	biofuel
BDN-001-0115	FAME	99.5 t	E	20.7	PoS-001-0011	biofuel
BDN-001-0118	FAME	93.3 t	E	15.5	PoS-001-0012	biofuel
BDN-001-0119	FAME	94.4 t	E	20.7	PoS-001-0013	biofuel
BDN-001-0121	FAME	98.7 t	E	20.7	PoS-001-0014	biofuel
BDN-001-0122	FAME	101.6 t	E	20.7	PoS-001-0015	biofuel
BDN-001-0124	FAME	103.5 t	E	13.1	PoS-001-0016	biofuel
BDN-001-0125	FAME	99.7 t	E	13.1	PoS-001-0017	biofuel

[CONTRADICTION] F18 more surplus registered or pooled than the ship has (765.4 t CO2eq)

Pool P-2026-01: 9810008 registered 2,709.5 t CO2eq; recalculated 1,944.1 t.

basis: Regulation (EU) 2023/1805 (FuelEU Maritime) Art. 21(4); Regulation (EU) 2023/1805 (FuelEU Maritime) Art. 16(4)

[CONTRADICTION] F20 pool not valid

Pool P-2026-01: 9810008 had a surplus (1,944.1 t) and ends in deficit (-216.3 t).

basis: Regulation (EU) 2023/1805 (FuelEU Maritime) Art. 21(4)

[CHECK] F12 high-risk raw material: sample the chain

animal_fat_cat1: 9 bio bunkers (911 t). Sample the chain behind them before relying on the surplus.

basis: supply-chain risk (UCO, POME, animal fat)

fueleu-surplus-witness 0.1.0. A recalculation of the ship's FuelEU GHG intensity and compliance balance from the company's own records (Regulation (EU) 2023/1805 Annexes I, II and IV, Articles 2, 10, 20 and 21; Directive (EU) 2018/2001 Annexes III and V), and a check of the proofs behind its biofuel. It does not replace the verifier or the FuelEU database; certificate data is only as current as the table supplied. Inputs are identified by SHA-256.