

Date: 18/Nov/2022

ALKAGESTA LTD

Dragonara Business Centre, 5th Floor, Dragonara Road, St. Julians, STJ 3141, MALTA

Analytical Report: GE22-02461.001

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The results reported herein have been performed in accordance with the laboratory's term of accreditation except calibrations/tests given. Asterisk (*) in this report which are not within the scope of accreditation for our laboratory. The results are given directly, without the measurement uncertainty and confidence level being taken into consideration in the conformity assessment by the laboratory. Measurement uncertainties are used to validate the method and our accreditation logo is an expression of that. We accept the results of reproducibility and precision in test methods that have international legal validity under legal conditions. Our measurement uncertainties do not include uncertainty arising from sampling.

CLIENT ORDER NUMBER :	Alkagesta LTD	SGS ORDER NO.:	20066818
CLIENT ID :	Opet Termianl-Marmara Ereğlisi	VESSEL :	M/T GENERAL SKOBELEV
LOCATION :	Ships Tanks	PRODUCT DESCRIPTION :	Fuel Oil
SAMPLE SOURCE :	Composite (UML) After Loading	SOURCE ID :	1-2-3-4-5-6-7-8-9-10-11-12
SAMPLE TYPE :	16/Nov/2022 23:30	SAMPLE BY :	SGS
SAMPLED :	17/Nov/2022 02:35 - 18/Nov/2022 09:44	RECEIVED :	17/Nov/2022 02:30
ANALYSED :	07696	COMPLETED :	18/Nov/2022 09:44
SAMPLE REF NO.:		SEAL NO.:	354996
SAMPLE COMMENT :	Ship Tank Quantity: 1:988,654 mt 2:1.006,956 mt 3:1.029,253 mt 4:1.044,147 mt 5:945,489 mt 6:926,482 mt 7:917,745 mt 8:933,009 mt 9:1.075,087 mt 10:1.064,000 mt 11:1.025,402 mt 12:1.044,972 mt		

PROPERTY	METHOD	RESULT UNITS	MIN	MAX
Density at 15 °C	EN ISO 3675	0.9527 kg/L	--	0.9970
Kinematic Viscosity at 100 °C	ISO 3104	19.45 mm ² /s	12.5	45
Pensky Martens Flash Point (Closed cup)	ISO 2719	95.0 °C	65	--
Procedure B				
Pour Point	ISO 3016	12 °C	--	28
Ash	ISO 6245	0.023 % (m/m)	--	0.1
Elements in Residual Fuel Oil by ICP	IP 501			
Vanadium		38 mg/kg	--	185
Sodium		13 mg/kg	--	50
Aluminium + Silicon		27 mg/kg	--	50
Aluminium		14 mg/kg	--	--

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CHECKED AND APPROVED:

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Page 1 of 2

OGC-En_report-2015-09-19_v60a ak

SGS Süpervise Gözetme Etüd Kontrol Servisleri A.Ş.
OGC Gebze Laboratory

CUMHURİYET MAH. YAVUZ SULTAN SELİM CAD. 118. SOK. NO:29, 41455 DİLOVASI - KOCAELİ,
TURKEY



Member of the SGS Group

Date: 18/Nov/2022

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SAMPLE SOURCE :	Ships Tanks	SOURCE ID :	1-2-3-4-5-6-7-8-9-10-11-12
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PROPERTY	METHOD	RESULT UNITS	MIN	MAX
Silicon		13 mg/kg	--	--
Calcium		5 mg/kg	--	30
Zinc		<1 mg/kg	--	15
Phosphorus		2 mg/kg	--	15
Sulfur	ISO 8754	0.976 % (m/m)	--	1.00
Cleanliness of Residual Fuels by Spot Test *	ASTM D4740	1 Rating	--	1
Cleanliness by Spot Test *				
Compatibility of Residual Fuels by Spot Test *	ASTM D4740	1 Rating	--	1
Compatibility *				
(Marine Gasoil 0,1 was used as blend stock (50/50))				
Carbon Residue - Micro Method	ASTM D4530	8.72 % (m/m)	--	15
Water Content	ASTM D95	0.30 % (V/V)	--	0.5
Potential Total Sediment	IP 390 Procedure A	0.02 % (m/m)	--	0.1
Net Calorific Value *	ASTM D4868	9795 kcal/kg	9665	--
Sediment by Extraction *	ASTM D473	0.04 % (m/m)	--	0.15
Asphaltene *	IP 143	3.7 % (m/m)	--	7.0
Total Sediments - Existent	IP 375	0.02 % (m/m)	--	0.1

** End of Analytical Results **

REPORT COMMENT :

This document is only valid in its entirety and your attention is drawn to the Terms and Conditions on Page 1 of this report.

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OGC-En_report-2015-09-19_v60a ak

Page 2 of 2

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