



Certificate of Quality

Vessel/Source:	MT Praisel	Date sample received:	22 December 2023
Location:	Seltex Jetty	Date Sampled :	22 December 2023
Product:	Fuel Oil	Date analysis commenced:	22 December 2023
Sampling Method:	ASTM D4057-22	Date analysis completed:	23 December 2023
Sample description:	Ship composite ex 3w		
Sample drawn by:	Q&Q Control Services Port Harcourt	Lab No :	QQPHL/120i-23
Sample analysed by:	Q&Q Control Services Port Harcourt Laboratory	QQ file:	QQPHC/089/23
Client(s):	Stratos Trading		

METHODS	PROPERTIES	ISO8217:17 RMG 380 Spec	UNITS	RESULTS
ISO 12185-96	Density @ 15°C	991.0 max	kg/m ³	912.5
ISO 3104-20	Kinematic viscosity @50°C	380 max	mm ² /s	21.51
ISO 2719-16	Flash Point PMCC (Method B)	60 min	°C	92.0
ISO 3016-19	Pour Point (Upper)	30 max	°C	+ 24
ISO 8754-03	Sulphur content	Report	mass%	0.229
ISO 8217-17 (Anx C)	CCAI	870 max	-	814
ISO 6245-01	Ash Content on 100.0007 g	0.100 max	mass%	0.006
ISO 3733-99	Water content	0.50 max	%vol	0.05
ASTM D664-18e2 proc A	*Acid number	2.5 max	mg KOH/g	0.30
IP 570-15(2021)	*Hydrogen Sulfide	2.0 max	mg/kg	0.01
ISO 10307-02:09 Proc A	*Total Sediment Aged	0.10 max	%(m/m)	0.02
ISO 10370-14	*Carbon residue, micro method	18.00 max	% mass	1.06
IP 501-19	*Vanadium	350 max	mg/kg	1
IP 501-19	*Sodium	100 max	mg/kg	1
IP 501-19	*Aluminium + Silicon	60 max	mg/kg	10
IP 501-19	*Calcium	note #	mg/kg	2
IP 501-19	*Phosphorus	note #	mg/kg	1
IP 501-19	*Zinc	note #	mg/kg	1
IP 501-19	*ULO metals P,Ca,Zn	note #	Pass/Fail	Pass

The above test and results are extracted from laboratory Report of Analysis QQPHL/120-23

Sample drawn via closed (vapour-lock) system and may not be fully representative.

Note # The oil shall be considered to contain ULO if either of the following conditions are met.

- Calcium is greater than 30 mg/kg and zinc is greater than 15 mg/kg
- Calcium is greater than 30 mg/kg and phosphorus is greater than 15 mg/kg

one of the specific conditions must be met before a fuel shall be deemed to contain ULO.

The product meets RMG 380 ISO 8217:17 specification requirement with respect to the tested parameters.

The test report is only for this sample

Environmental Conditions:

24.8±1 °C, 47.8±1 % RH and 101.3kPa

* Tested in Third Party Laboratory (Report no:EISL/QQ/2023/12/22)

Our responsibility is limited to our correct transference thereof from the testing laboratory test report

The testing laboratory retains all responsibility for equipment, reagents conditions and calibration, and for the competence of personnel responsible for laboratory operation and testing methodology and performance.

This report shall not be reproduced except in full without approval from Q&Q control services, Port Harcourt laboratory. Unsigned and unauthorised reports are invalid

Authorised by:

Eze, Eseni



Signature:

Issued by Q&Q Control Services Port Harcourt Laboratory Date: 23 December 2023

END OF REPORT