

**Service update:** Off-specification fuel quality report

**Applicability:** Lloyd's Register FOBAS clients

Information: Between 15th and 31st December 2019 FOBAS identified XX instances where a result was outside the 95% confidence limit of either ISO 8217 6th edition test parameter or a value given by the BDN or sample label

Port	Characteristic	ISO 8217 Limit or Advised Value	Final result	Unit
Ahirkapi	Flash point	60.0***	58.0	°C
Ahirkapi	Flash point	60.0***	59.0	°C
Antwerp	Density at 15°C	1.0039**	1.0039	kg/l
Antwerp	Flash point	60.0***	59.0	°C
Antwerp	Flash point	60.0***	57.5	°C
Antwerp	Total Sediment Potential	0.10*	0.21	% Mass
Antwerp	Viscosity at 50°C	493.7**	501.6	cSt
Arzew	Total Sediment Potential	0.10*	0.47	% Mass
Bacia De Campos	Sulphur	0.00**	0.17	% Mass
Balboa	Total Sediment Potential	0.10*	0.25	% Mass
Bangkok	Pour point	0*	6	oC
Beverwijk	Aluminium + Silicon	60*	193	mg/kg
Beverwijk	Ash	0.100*	0.110	% Mass
Beverwijk	CCAI	870*	876	Index
Beverwijk	Density at 15°C	0.9502**	1.0133	kg/l
Beverwijk	Total Sediment Potential	0.10*	0.18	% Mass
Bozcaada	Water	0.50*	2.00	% Volume
Brunswick	Density at 15°C	0.9882**	0.9941	kg/l
Callao	Viscosity at 50°C	364.0**	398.0	cSt

Corpus Christi	MCR 10% bottom	0.30*	0.47	% Mass
Dakar	Flash point	60.0***	57.5	°C
Fortaleza	Acid Number	2.50*	4.14	mgKOH/g
Fujairah	Water	0.50*	1.30	% Volume
Ghent (Gent)	Total Sediment Potential	0.10*	0.33	% Mass
Hadong	MCR 10% bottom	0.30*	1.16	% Mass
Hadong	Sulphur	0.03**	0.47	% Mass
Hadong	Viscosity at 40°C	3.69**	9.1	cSt
Hamburg	Viscosity at 50°C	380.0**	497.4	cSt
Holyhead	ULO	None	None	
Hong Kong	Viscosity at 50°C	180.0**	348.8	cSt
Hong Kong	Water	0.50*	1.10	% Volume
Huizhou	Sulphur	0.04**	0.16	% Mass
Ijmuiden	ULO	Detected	Detected	
Istanbul	Flash point	60.0***	58.00	°C
Istanbul	ULO	Detected	Detected	
Istanbul	Viscosity at 50°C	180.0**	363.6	cSt
Istanbul	Water	0.50*	0.90	% Volume
Khor Fakkan	Aluminium + Silicon	60*	105	mg/kg
Kingston	Total Sediment Potential	0.10*	0.86	% Mass
Koh Si Chang Transhipment Area	Total Sediment Potential	0.10*	0.2	% Mass
Koh Si Chang Transhipment Area	Viscosity at 50°C	380.0**	398.2	cSt
Ko Sichang	Water	0.50*	0.75	% Volume
Kozmino	Water	0.50*	0.85	% Volume
La Spezia	Viscosity at 50°C	180.0**	200.1	cSt
Manzanillo	Ash	0.100*	0.14	% Mass
Manzanillo	Water	0.50*	1.20	% Volume
Miami	Total Sediment Potential	0.10*	0.26	% Mass
Miami	Total Sediment Potential	0.10*	0.17	% Mass

Mobile	Sulphur	0.09**	0.12	% Mass
Mumbai	Acid Number	2.50*	2.89	mgKOH/g
Mumbai	Acid Number	2.50*	2.94	mgKOH/g
Nanjing	Water	0.50*	0.90	% Volume
Ningbo	Water	0.50*	0.65	% Volume
Paldiski	Density at 15°C	0.9895**	0.9928	kg/l
Paldiski	Viscosity at 50°C	380.0**	437.6	cSt
Pembroke	Aluminium + Silicon	60*	101	mg/kg
Pembroke	Water	0.50*	1.90	% Volume
Philadelphia	Cetane index	40**	31	Index
Philadelphia	Viscosity at 50°C	365.0**	396.7	cSt
Piraeus	Total Sediment Potential	0.10*	0.16	% Mass
Piraeus	Total Sediment Potential	0.10*	0.20	% Mass
Richmond (California)	Density at 15°C	0.9905**	0.9956	kg/l
Rotterdam	Total Sediment Potential	0.10*	0.2	% Mass
Rotterdam	Total Sediment Potential	0.10*	0.52	% Mass
Rotterdam	Total Sediment Potential	0.10*	0.46	% Mass
Rotterdam	Viscosity at 40°C	5.50**	6.0	cSt
Rotterdam	Viscosity at 50°C	676.4**	750.5	cSt
Rotterdam	Water	0.50*	1.65	% Volume
San Antonio	Total Sediment Potential	0.10*	0.79	% Mass
Shanghai	Water	0.50*	0.65	% Volume
Shanghai	Water	0.50*	0.65	% Volume
Singapore	Flash point	60.0***	59.0	°C
Singapore	MCR 10% bottom	0.30*	2.92	% Mass
Singapore	MCR 10% bottom	0.30*	4.51	% Mass
Singapore	Pour point	0*	6	oC
Singapore	Pour point	0*	6	oC
Singapore	Pour point	0*	6	oC
Singapore	Pour point	0*	6	oC
Singapore	Pour point	0*	6	oC
Singapore	Pour point	0*	9	oC
Singapore	Pour point	0*	6	oC
Singapore	Pour point	0*	6	oC
Singapore	Pour point	0*	6	oC
Singapore	Pour point	0*	6	oC

Singapore	Pour point	0*	6	oC
Singapore	Pour point	0*	6	oC
Singapore	Pour point	0*	6	oC
Singapore	Pour point	0*	12	oC
Singapore	Sulphur	0.08**	0.31	% Mass
Singapore	Sulphur	0.09**	0.12	% Mass
Singapore	Total Sediment Potential	0.10*	0.35	% Mass
Singapore	Total Sediment Potential	0.10*	0.52	% Mass
Singapore	Total Sediment Potential	0.10*	0.16	% Mass
Singapore	Total Sediment Potential	0.10*	0.51	% Mass
Singapore	Total Sediment Potential	0.10*	0.41	% Mass
Singapore	Total Sediment Potential	0.10*	0.26	% Mass
Singapore	Viscosity at 50°C	363.1**	573.8	cSt
St Maarten	Flash point	60.0***	59.00	°C
St Petersburg	CCAI	860*	863	Index
St Petersburg	Water	Trace*	0.60	% Volume
Talara	Sulphur	0.20**	0.20	% Mass
Tanjung Pelepas	Pour point	0*	6	oC
Travemunde	Viscosity at 50°C	347.7**	398.7	cSt
Wilmington (Delaware)	Cetane index	40**	36	Index
Wilmington (Delaware)	MCR 10% bottom	0.30*	2.96	% Mass
Wilmington (Delaware)	Water	Trace*	0.71	% Volume

\*ISO 8217 6th edition limit

\*\*Advised value from BDN or sample label.

\*\*\*Due to the statutory significance of Flash Point the 95% confidence limit is not applied.

This report contains selected parameters taken from the FOBAS routine analysis data of ship drawn as bunkered samples. These reports will provide progressive snap shot of information every two weeks on the problematic quality characteristics of marine fuels as tested but should not be viewed in isolation. The results given, of course, do not necessarily reflect the overall quality of fuels delivered at a particular port. Note 95% confidence limit as per ISO 4259 Petroleum products: Determination and application of precision data in relation to methods of test

Note: This report has been prepared against ISO 8217 6th edition, as published March 2017. See CIMAC FAQ doc on ISO 8217 for more details (available in our technical library at [www.fobas.com](http://www.fobas.com)).

However, we fully recognise that many of the fuel deliveries covered by this report will have been specified and delivered against earlier versions of ISO 8217 or other specifications and hence will include instances where the fuel 'as bunkered' was fully within the purchaser's required specification. As has always been the case for FOBAS, it is recognised that there is an important distinction between a fuel not meeting, or meeting, a specification requirement and its suitability for use in particular cases.

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