

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

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

Information: Between 1st and 14th October 2019 FOBAS identified 102 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
Amsterdam	Viscosity at 50°C	376.6**	397.8	cSt
Antwerp	Flash point	60.0***	57.00	°C
Antwerp	Viscosity at 50°C	377.0**	404.6	cSt
Antwerp	Viscosity at 50°C	377.0**	398.4	cSt
Antwerp	Viscosity at 50°C	376.0**	404.3	cSt
Antwerp	Viscosity at 50°C	699.4**	740.1	cSt
Antwerp	Viscosity at 50°C	367.0**	403.3	cSt
Balboa	CCAI	870*	874	Index
Balboa	Water	0.50*	1.10	% Volume
Balboa	Water	0.50*	1.00	% Volume
Balboa	Water	0.50*	1.00	% Volume
Balboa	Water	0.50*	0.80	% Volume
Balboa	Water	0.50*	1.10	% Volume
Balboa	Water	0.50*	0.75	% Volume
Balboa	Water	0.50*	1.00	% Volume
Balboa	Water	0.50*	0.90	% Volume
Balikpapan	Water	0.50*	4.00	% Volume
Baltiysk	Sulphur	0.09**	0.12	% Mass
Bolivar Roads (Galveston Texas)	Total Sediment Potential	0.10*	0.38	% Mass
Cadiz	Density at 15°C	0.9898**	0.9927	kg/l
Cadiz	Density at 15°C	0.9898**	0.9925	kg/l

Callao	Viscosity at 50°C	355.9**	398.3	cSt
Callao	Viscosity at 50°C	355.9**	403.7	cSt
Callao	Viscosity at 50°C	355.9**	399.1	cSt
Cartagena	Aluminium + Silicon	60*	82	mg/kg
Cartagena	Ash	0.100*	0.154	% Mass
Cartagena	Water	0.50*	0.65	% Volume
Dammam	Viscosity at 50°C	175.0**	194.1	cSt
Djibouti	Viscosity at 50°C	380.0**	425.1	cSt
Djibouti	Viscosity at 50°C	380.0**	407.2	cSt
Flushing	Viscosity at 50°C	374.0**	409.4	cSt
Fujairah	Acid Number	2.50*	3.03	mgKOH/g
Fujairah	Acid Number	2.50*	3.16	mgKOH/g
Fujairah	Sulphur	3.47**	3.69	% Mass
Fujairah	Viscosity at 50°C	372.3**	400.1	cSt
Genoa	Density at 15°C	0.9882**	0.9924	kg/l
Ghent (Gent)	Sulphur	0.10**	0.12	% Mass
Ghent (Gent)	Viscosity at 50°C	7.4**	88.0	cSt
Ghent (Gent)	Viscosity at 50°C	5.8**	88.2	cSt
Gibraltar	Viscosity at 50°C	379.4**	396.8	cSt
Haifa	Viscosity at 50°C	373.0**	397.4	cSt
Haifa	Viscosity at 50°C	373.0**	412.3	cSt
Houston	ULO	detected	detected	
Johor Bahru (Malaysia)	Sulphur	0.06**	0.15	% Mass
Kalamata	Water	0.50*	0.90	% Volume
Lisbon	Total Sediment Potential	0.10*	0.28	% Mass
Lome	Sulphur	0.07**	0.15	% Mass
Long Beach	Water	0.50*	0.75	% Volume
Los Angeles	Water	0.50*	0.80	% Volume
Los Angeles	Water	0.50*	0.70	% Volume
Marcus hook	Cetane index	40**	39	Index
New York	Sulphur	0.08**	0.13	% Mass

Ningbo	Sulphur	0.08**	0.15	% Mass
Off Skaw	Viscosity at 50°C	320.9**	409.1	cSt
Philadelphia	Cetane index	40**	38	Index
Piraeus	Density at 15°C	0.9900**	0.9946	kg/l
Pointe a Pierre	Water	0.50*	0.85	% Volume
Port Arthur	Density at 15°C	0.9903**	0.9937	kg/l
Primorsk	Sulphur	0.08**	0.19	% Mass
Rotterdam	Pour point	30*	36	oC
Rotterdam	Pour point	30*	36	oC
Rotterdam	Sulphur	0.09**	0.13	% Mass
Rotterdam	Sulphur	0.09**	0.12	% Mass
Rotterdam	Viscosity at 40°C	6.00**	6.0	cSt
Rotterdam	Viscosity at 50°C	699.0**	736.0	cSt
Rotterdam	Viscosity at 50°C	374.0**	407.6	cSt
Rotterdam	Viscosity at 50°C	7.4**	89.1	cSt
Rotterdam	Viscosity at 50°C	377.0**	398.9	cSt
Rotterdam	Viscosity at 50°C	376.0**	405.8	cSt
Rotterdam	Viscosity at 50°C	699.4**	742.6	cSt
Rotterdam	Viscosity at 50°C	376.0**	397.2	cSt
Rotterdam	Viscosity at 50°C	380.0**	404.2	cSt
Singapore	Density at 15°C	0.9908**	0.9943	kg/l
Singapore	Density at 15°C	0.9890**	0.9964	kg/l
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	Sulphur	0.09**	0.12	% Mass
Singapore	Water	0.50*	0.65	% Volume
Singapore	Water	0.50*	1.30	% Volume
St Petersburg	Density at 15°C	0.9909**	0.9922	kg/l
Suez	Sulphur	0.07**	0.16	% Mass

Talara	Flash point	60.0***	58.5	°C
Tallinn	Water	0.50*	1.40	% Volume
Tanjung Pelepas	Aluminium + Silicon	60*	75	mg/kg
Tanjung Pelepas	Ash	0.100*	0.178	% Mass
Tanjung Pelepas	Sodium	100*	250	mg/kg
Tanjung Pelepas	Total Sediment Potential	0.10*	0.18	% Mass
Tanjung Pelepas	ULO	detected	detected	
Tanjung Pelepas	Water	0.50*	1.30	% Volume
Visakhapatnam	Viscosity at 50°C	345.1**	410.1	cSt
Vlissingen	Viscosity at 50°C	377.0**	401.5	cSt
Vlissingen	Viscosity at 50°C	7.4**	87.4	cSt
Yangzhou	Water	0.50*	0.75	% Volume
Zeebrugge	Sulphur	0.10**	0.13	% Mass
Zeebrugge	Sulphur	0.07**	0.12	% Mass
Zeebrugge	Viscosity at 50°C	370.0**	397.4	cSt

\*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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