FOBAS

Date: 3 May 2019

Service update: Off-specification fuel quality report

Applicability: Lloyd's Register FOBAS clients

Information: Between 15th and 30th April 2019 FOBAS identified 69 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
Amuay bay	Flash point	60.0***	41.50	°C
Amuay bay	Water	0.50*	1.20	% Volume
Antwerp	Density at 15°C	0.9908**	0.9920	kg/l
Antwerp	Flash point	60.0***	59.00	°C
Antwerp	Viscosity at 50°C	356.0**	406.0	cSt
Antwerp	Viscosity at 50°C	380.0**	414.8	cSt
Antwerp	Viscosity at 50°C	74.0**	93.0	cSt
Antwerp	Viscosity at 50°C	380.0**	551.2	cSt
Antwerp	Viscosity at 50°C	380.0**	403.2	cSt
Balboa	Viscosity at 50°C	366.2**	397.4	cSt
Bangkok	Viscosity at 50°C	351.1**	414.8	cSt
Callao	Viscosity at 50°C	351.0**	411.0	cSt
Ceuta	Ash	0.100*	0.207	% Mass
Ceuta	Viscosity at 50°C	180.0**	251.9	cSt
Changshu	Water	0.50*	1.55	% Volume
Flushing	Carbon residue	18.00*	19.59	% Mass
Flushing	Viscosity at 50°C	377.0**	398.7	cSt
Fortaleza	Acid Number	2.50*	3.90	mgKOH/g
Fujairah	Sulphur	3.48**	3.75	% Mass

Ghent (Gent)	Total Sediment Potential	0.10*	0.59	% Mass
Ghent (Gent)	Vanadium	150*	201	mg/kg
Ghent (Gent)	Viscosity at 40°C	6.00**	6.0	cSt
Gibraltar	Viscosity at 50°C	370.5**	446.3	cSt
Hanko	Viscosity at 50°C	379.1**	400.1	cSt
Hong Kong	Ash	0.070*	0.702	% Mass
Hong Kong	Sodium	100*	1585	mg/kg
Hong Kong	Viscosity at 50°C	180.0**	217.2	cSt
Hong Kong	Water	0.50*	3.00	% Volume
Huizhou	Flash point	60.0***	54.00	°C
Huizhou	Sulphur	0.09**	0.19	% Mass
Istanbul	MCR 10% bottom	0.30*	0.42	% Mass
Karachi	Sulphur	0.07**	0.34	% Mass
Kingston	Viscosity at 50°C	325.0**	462.1	cSt
Koh Si Chang Transhipment Area	Viscosity at 50°C	348.4**	416.9	cSt
Kozmino	Viscosity at 40°C	5.35**	6.5	cSt
Las Palmas	Aluminium + Silicon	60*	193	mg/kg
Manzanillo	Ash	0.100*	0.123	% Mass
Manzanillo	Density at 15°C	0.9695**	0.9949	kg/l
Manzanillo	Sulphur	3.45**	3.77	% Mass
Manzanillo	Viscosity at 50°C	380.0**	626.3	cSt
Manzanillo	Viscosity at 50°C	380.0**	441.2	cSt
Manzanillo	Water	0.50*	1.20	% Volume
Maptaphut	Viscosity at 50°C	379.6**	400.4	cSt
Piraeus	Water	0.50*	0.85	% Volume
Port Rashid	Total Sediment Potential	0.10*	0.52	% Mass
Punta Cardon	Water	0.50*	0.70	% Volume
Rio de Janeiro	Density at 15°C	0.9898**	0.9923	kg/l
Rio de Janeiro	Density at 15°C	0.9898**	0.9924	kg/l
Rio Grande	Water	0.50*	0.85	% Volume

Rotterdam	Viscosity at 50°C	379.3**	482.0	cSt
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	Vanadium	150*	182	mg/kg
Singapore	Viscosity at 50°C	178.4**	203.8	cSt
Singapore	Viscosity at 50°C	178.4**	220.0	cSt
Singapore	Viscosity at 50°C	335.1**	399.9	cSt
Singapore	Water	0.50*	0.90	% Volume
Sriracha	Viscosity at 50°C	361.8**	441.3	cSt
Stapleton	Viscosity at 50°C	370.0**	430.3	cSt
St Petersburg	Viscosity at 50°C	346.7**	450.0	cSt
St Petersburg	Viscosity at 50°C	363.0**	435.8	cSt
Vlissingen	Viscosity at 50°C	377.0**	430.9	cSt
Xiamen	Viscosity at 50°C	368.0**	437.1	cSt
Zeebrugge	Density at 15°C	0.9910**	0.9922	kg/l
Zeebrugge	Density at 15°C	0.9910**	0.9921	kg/l
Zeebrugge	Viscosity at 50°C	377.0**	397.3	cSt
Zeebrugge	Water	0.50*	0.65	% 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).
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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