FOBAS

Date: 8 November 2019

Service update: Off-specification fuel quality report

Applicability: Lloyd's Register FOBAS clients

Information: Between 15th and 31st October 2019 FOBAS identified 112 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
Antwerp	Sulphur	0.09**	0.12	% Mass
Antwerp	Viscosity at 40°C	5.40**	6.31	cSt
Antwerp	Viscosity at 40°C	5.40**	6.22	cSt
Antwerp	Viscosity at 50°C	7.4**	89.5	cSt
Antwerp	Viscosity at 50°C	377.0**	401.6	cSt
Antwerp	Viscosity at 50°C	377.0**	401.0	cSt
Antwerp	Viscosity at 50°C	495.6**	524.5	cSt
Ashdod	Viscosity at 50°C	374.0**	401.5	cSt
Balboa	CCAI	870*	875	Index
Balboa	CCAI	860*	864	Index
Balboa	Viscosity at 50°C	281.7**	398.0	cSt
Balboa	Viscosity at 50°C	485.1**	522.3	cSt
Balboa	Water	0.50*	0.90	% Volume
Bolivar Roads (Galveston Texas)	Density at 15°C	0.9905**	0.9956	kg/l
Bosporus	Viscosity at 50°C	380.0**	397.2	cSt
Cartagena	Density at 15°C	0.9882**	0.9934	kg/l
Cartagena	Viscosity at 50°C	327.0**	427.1	cSt
Ceuta	Flash point	60.0***	59.00	°C
Ceuta	Flash point	60.0***	59.00	°C
Ceuta	Flash point	60.0***	58.50	°C
Ceuta	Viscosity at 50°C	180.0**	227.9	cSt
Ceuta	Water	0.50*	0.95	% Volume

Corpus Christi	Total Sediment Potential	0.10*	0.15	% Mass
Cristobal	Water	0.50*	1.20	% Volume
Djibouti	Viscosity at 50°C	380.0**	406.0	cSt
Falmouth	Aluminium + Silicon	60*	157	mg/kg
Falmouth	Aluminium + Silicon	60*	146	mg/kg
Flushing	Viscosity at 40°C	3.50**	6.16	cSt
Freeport Bahamas	Aluminium + Silicon	60*	91	mg/kg
Freeport Bahamas	Flash point	60.0***	56.50	°C
Freeport Bahamas	Water	0.50*	0.75	% Volume
Fujairah	Acid Number	2.50*	2.89	mgKOH/g
Ghent (Gent)	Sulphur	0.09**	0.23	% Mass
Ghent (Gent)	Sulphur	0.10**	0.12	% Mass
Ghent (Gent)	Viscosity at 40°C	3.50**	6.18	cSt
Ghent (Gent)	Viscosity at 50°C	7.4**	88.8	cSt
Gibraltar	Viscosity at 50°C	158.2**	194.0	cSt
Gibraltar	Viscosity at 50°C	375.7**	397.7	cSt
Gothenburg	Viscosity at 50°C	180.0**	195.9	cSt
Haifa	Viscosity at 50°C	341.0**	408.9	cSt
Haifa	Viscosity at 50°C	341.0**	408.1	cSt
Houston	Total Sediment Potential	0.10*	0.27	% Mass
Istanbul	Viscosity at 50°C	380.0**	403.1	cSt
Juaymah Crude & LPG Terminals	Viscosity at 50°C	178.2**	191.2	cSt
Juaymah Crude & LPG Terminals	Viscosity at 50°C	179.4**	209.8	cSt
Juaymah Crude & LPG Terminals	Viscosity at 50°C	177.3**	188.8	cSt
Juaymah Crude & LPG Terminals	Viscosity at 50°C	178.4**	190.5	cSt
Juaymah Crude & LPG Terminals	Viscosity at 50°C	177.3**	209.8	cSt
Koh Si Chang Transhipment Area	Viscosity at 50°C	344.4**	406.0	cSt
La Libertad	Viscosity at 50°C	380.0**	410.4	cSt
Las Palmas	MCR 10% bottom	0.30*	0.86	% Mass
Las Palmas	Viscosity at 50°C	378.4**	407.1	cSt
Las Palmas	Viscosity at 50°C	180.0**	209.6	cSt

Los Angeles	Water	0.50*	1.50	% Volume
Mazatlan	Viscosity at 50°C	332.1**	439.6	cSt
Mobile	Density at 15°C	0.9794**	0.9931	kg/l
Nakhodka	Water	0.50*	0.95	% Volume
Nederland	MCR 10% bottom	0.30*	4.57	% Mass
Nederland	Sulphur	0.08**	0.23	% Mass
Not Stated	Viscosity at 50°C	374.0**	397.0	cSt
Off Skaw	Viscosity at 50°C	379.1**	398.0	cSt
Pasir Gudang (Malaysia)	Ash	0.100*	0.207	% Mass
Pasir Gudang (Malaysia)	Sodium	100*	409	mg/kg
Pasir Gudang (Malaysia)	Water	0.50*	4.50	% Volume
Piraeus	Viscosity at 50°C	178.0**	211.2	cSt
Port Kelang	Water	0.50*	1.15	% Volume
Port Klang	Viscosity at 50°C	333.6**	397.9	cSt
Porto Grande	Viscosity at 50°C	373.3**	401.5	cSt
Port Said	Viscosity at 50°C	374.0**	401.3	cSt
Port Said	Water	0.50*	1.05	% Volume
Puerto Galvan (Galvan)	Viscosity at 50°C	372.0**	405.9	cSt
Rio Grande	Viscosity at 50°C	3.8**	119.6	cSt
Rizhao	Total Sediment Potential	0.10*	0.19	% Mass
Rotterdam	CCAI	860*	866	Index
Rotterdam	Sulphur	0.10**	0.20	% Mass
Rotterdam	Sulphur	0.09**	0.13	% Mass
Rotterdam	ULO	Detected	Detected	
Rotterdam	Viscosity at 50°C	98.3**	101.0	cSt
Rotterdam	Viscosity at 50°C	66.3**	89.1	cSt
Rotterdam	Viscosity at 50°C	377.0**	396.9	cSt
Rotterdam	Viscosity at 50°C	380.0**	398.3	cSt
Rotterdam	Viscosity at 50°C	377.0**	397.9	cSt
Rotterdam	Viscosity at 50°C	151.0**	312.4	cSt
Rotterdam	Viscosity at 50°C	380.0**	398.2	cSt
Sharjah	Viscosity at 50°C	172.0**	195.5	cSt

Sharjah	Viscosity at 50°C	172.0**	196.0	cSt
Singapore	CCAI	860*	863	Index
Singapore	Density at 15°C	0.9905**	0.9920	kg/l
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	ULO	Detected	Detected	
Sriracha	Viscosity at 50°C	349.7**	422.5	cSt
St Petersburg	Density at 15°C	0.9895**	0.9941	kg/l
St Petersburg	Water	0.50*	0.65	% Volume
Travemunde	Viscosity at 50°C	376.9**	426.6	cSt
Valletta	Water	0.50*	0.85	% Volume
Valletta	Water	0.50*	1.05	% Volume
Vlaardingen	Viscosity at 50°C	380.0**	403.6	cSt
Vlissingen	Viscosity at 40°C	3.50**	6.22	cSt
Walvis bay	Carbon residue	18.00*	20.04	% Mass
Walvis bay	CCAI	860*	864	Index
Yalova - Aksa Kimya	Water	0.50*	1.70	% Volume
Zeebrugge	Sulphur	0.09**	0.43	% Mass
Zeebrugge	Water	0.50*	0.90	% Volume
Zhangjiagang	Pour point	0*	6	oC
Zhoushan	Water	0.50*	1.50	% 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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