OILCHECK
Marine Oils Condition Monitoring Report

Customer Information		Sample Information		Condition
Customer:		Sample request number:	131889	
Vessel:		Lab number:	19050106	
IMO No:		Vessel equipment:	MAIN ENGINE No1	
E-mail:		Product name:	ALFAMAR 440	
		Analysis Date:	8/5/2019	

	Method	Last Sample	Previous Samples				Critical Limits		
GENERAL INFORMATION		1	2	3	4	5			
Lab number		19050106	19040098	19030041	19020447	19010083			
Lubricant		ALFAMAR 440	ALFAMAR 440	ALFAMAR 440	ALFAMAR 440	ALFAMAR 440			
Port		PIRAEUS	PIRAEUS	PIRAEUS	PIRAEUS	PIRAEUS			
Date sampled		30/4/2019	31/3/2019	28/2/2019	31/1/2019	31/12/2018	Normal	Attention	Emergency
Date received		8/5/2019	4/4/2019	6/3/2019	15/2/2019	9/1/2019			
Oil Hours		N/A	N/A	N/A	N/A	N/A			
Total engine hours		29625	N/A	28914	28079	27448			
Consumption l/d		NIL	NIL	NIL	NIL	NIL			
Physichochemical properties									
Appearance	VISUAL	BLACK	BLACK	BLACK	BLACK	BLACK			
Viscosity @ 100°C (mm²/s)	ASTM D445	16,45	17,27	17,04	16,99	16,84		>25% or <15%	
Viscosity @ 40°C (mm²/s)	ASTM D445	162,3	169,1	168,8	165,5	164,2		>25% or <15%	
TBN (mg KOH/gr)	ASTM D 2896	36,69	34,21	34,11	34,5	35,31		<30% to typical	<50%to typical
Flash point °C (PMC)	ASTM D 93	>190	>190	>190	>190	>190		<190	<190
Water (% vol.)	ASTM D 6304	<0,2	<0,2	<0,2	<0,2	<0,2	<0,50%	0.50-1.00 %	>1.00 %
Pentane Insolubes	ASTM D893	1,46	2,18	1,19	1,33	1,33		2,0-3,0	>3,0
Wear metals (ppm)									
Iron (Fe)	ASTM D5185	22	27	28	26	19	<100	100-200	>200
Lead (Pb)	ASTM D5185	0	1	1	0	0	<50	50-10	>100
Copper (Cu)	ASTM D5185	1	1	1	1	1	<100	100-200	>200
Tin (Sn)	ASTM D5185	0	0	0	0	0	<15	15-50	>50
Chromium (Cr)	ASTM D5185	1	1	1	1	1	<15	15-50	>50
Silver (Ag)	ASTM D5185	0	1	0	0	1	<15	15-50	>50
Cadmium (Cd)	ASTM D5185	0	0	0	0	0	<15	15-50	>50
Aluminium (Al)	ASTM D5185	5	6	6	6	5	<15	15-50	>50
Additive metals (ppm)									
Phosphorus (P)	ASTM D5185	403	355	363	347	305		<25%to typical	<50% to typical
Calcium (Ca)	ASTM D5185	13352	13448	13691	13680	13583		<25%to typical	<50% to typical
Zinc (Zn)	ASTM D5185	463	396	445	386	357		<25%to typical	<50% to typical
Barium (Ba)	ASTM D5185	2	2	2	2	1			
Molybdenum (Mo)	ASTM D5185	1	1	1	1	1			
Magnesium (Mg)	ASTM D5185	76	61	71	62	59			
Contamination (ppm)									
Vanadium (V)	ASTM D5185	34	47	46	44	39			
Nickel (Ni)	ASTM D5185	28	35	35	31	24			
Sodium (Na)	ASTM D5185	32	41	40	37	32			
Total silicon (Si)	ASTM D5185	14	12	13	11	11			

Comments

Normal values of physical-chemical properties and wear metals. The lubricant in proper condition for further use.