



OIL REPORT

LAB NUMBER: P62173

UNIT ID: 89 MONK 42-S

REPORT DATE: 4/18/2022

CLIENT ID: 199925

CODE: 20/68

PAYMENT: CC: Visa

UNIT

MAKE/MODEL: Cummins Marine 6BT 5.9L
FUEL TYPE: Diesel
ADDITIONAL INFO: Trawler

OIL TYPE & GRADE: Shell Rotella T4 15W/40
OIL USE INTERVAL: 210 Hours

CLIENT

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COMMENTS

DAVID: This sample from the starboard engine looks great. Wear metals are well below average after 210 hours of oil use, and that's great news because universal averages for this type of Cummins engine show typical wear after about 140 hours of oil use. Less metal after a much longer run means internal parts are working well together and no mechanical problems exist. The viscosity is slightly low and fuel dilution may have thinned it. The good news is 1.0% fuel dilution is harmless and it's probably from normal use, not an issue. Nice first report for the starboard engine!

ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	210	UNIT / LOCATION AVERAGES						UNIVERSAL AVERAGES
	MI/HR on Unit	6,791							
	Sample Date	4/5/2022							
	Make Up Oil Added	0 qts							
	ALUMINUM	1		1					2
	CHROMIUM	0		0					1
	IRON	3		3					12
	COPPER	1		1					1
	LEAD	0		0					0
	TIN	0		0					0
	MOLYBDENUM	0		0					20
	NICKEL	0		0					0
	MANGANESE	0		0					0
	SILVER	0		0					0
	TITANIUM	0		0					2
	POTASSIUM	7		7					4
	BORON	177		177					140
	SILICON	3		3					6
	SODIUM	3		3					5
	CALCIUM	2348		2348					2018
	MAGNESIUM	14		14					261
	PHOSPHORUS	1047		1047					1033
	ZINC	1200		1200					1169
	BARIUM	0		0					0

Values
Should Be*

PROPERTIES	SUS Viscosity @ 210°F	68.7	69-79					
	cSt Viscosity @ 100°C	12.61	12.7-15.5					
	Flashpoint in °F	405	>415					
	Fuel %	1.0	<3.0					
	Antifreeze %	0.0	0.0					
	Water %	0.0	0.0					
	Insolubles %	0.2	<0.6					
	TBN							
	TAN							
	ISO Code							

* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

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