



# OIL REPORT

LAB NUMBER: P62173  
 REPORT DATE: 4/18/2022  
 CODE: 20/68

UNIT ID: 89 MONK 42-S  
 CLIENT ID: 199925  
 PAYMENT: CC: Visa

<b>UNIT</b>	MAKE/MODEL: Cummins Marine 6BT 5.9L	OIL TYPE & GRADE: Shell Rotella T4 15W/40
	FUEL TYPE: Diesel	OIL USE INTERVAL: 210 Hours
	ADDITIONAL INFO: Trawler	

<b>CLIENT</b>	DAVID FRYE	PHONE: (410) 274-9659
	5760 CALVERT BLVD	FAX:
	SAINT LEONARD, MD 20685	ALT PHONE:
		EMAIL: davebetsy@comcast.net

**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!

<b>ELEMENTS IN PARTS PER MILLION</b>	MI/HR on Oil	210	<b>UNIT / LOCATION AVERAGES</b>					<b>UNIVERSAL AVERAGES</b>
	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\*

<b>PROPERTIES</b>	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

416 E. PETTIT AVE. FORT WAYNE, IN 46806 (260) 744-2380 www.blackstone-labs.com