

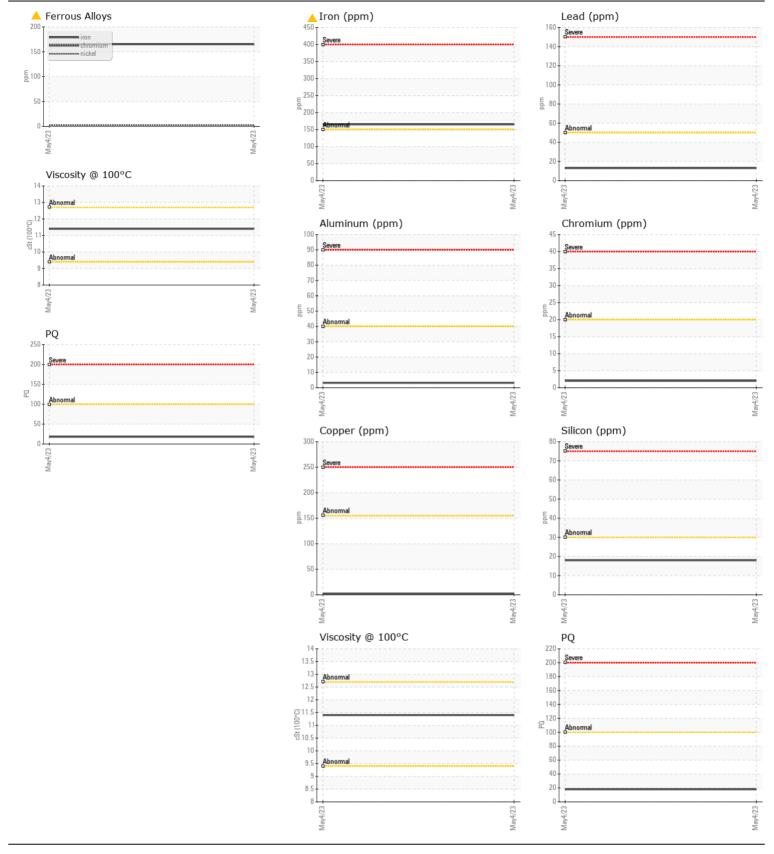
## Machine Id MAXUM OL (S/N MXGA09MVE900) Component Starboard Gasoline Engine MERCRUISER 25W40 (--- GAL)

## RECOMMENDATION

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
We recommend that you change the oil at the next available stoppage or outage. We recommend an early resample to monitor this condition.	Sample Number		Client Info		WC0752495		
	Sample Date		Client Info		04 May 2023		
	Machine Age	hrs	Client Info		0		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Not Changd		
	Filter Changed		Client Info		Not Changd		
	Sample Status				ABNORMAL		
WEAR	PQ		ASTM D8184*		18		
Iron ppm levels are abnormal. Cylinder, crank, or cam shaft wear is indicated.	Iron	ppm	ASTM D5185(m)	>150	<u> </u>		
	Chromium	ppm	ASTM D5185(m)	>20	2		
	Nickel	ppm	ASTM D5185(m)		<1		
	Titanium		ASTM D5185(m)	20	<1		
	Silver	ppm	ASTM D5185(m)	>2	0		
	Aluminum	ppm	· · ·				
	Lead	ppm	ASTM D5185(m) ASTM D5185(m)	>40	3 13		
		ppm	( /				
	Copper	ppm	ASTM D5185(m)		2		
	Tin	ppm	ASTM D5185(m)	>10	3		
	Vanadium	ppm	ASTM D5185(m)	NONE	0		
	White Metal	scalar	Visual*	NONE	NONE		
	Yellow Metal	scalar	Visual*	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>30	18		
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185(m)	>20	<1		
	Fuel		WC Method	>4.0	<1.0		
	Water		WC Method		NEG		
	Glycol		WC Method		NEG		
	Soot %	%	ASTM D7844*		0		
	Nitration		ASTM D7624*	>20	7.2		
	Sulfation			>30	17.4		
	Silt	scalar	Visual*	NONE	NONE		
	Debris		Visual*	NONE	NONE		
	Sand/Dirt	scalar	Visual*	NONE	NONE		
	Appearance	scalar	Visual*	NORML	NORML		
	Odor	scalar	Visual*	NORML	NORML		
	Emulsified Water	scalar		>0.2	NEG		
		Scalai	visual	20.2	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)	>400	3		
The oil is no longer serviceable as a result of the abnormal and/or severe wear.	Boron	ppm	ASTM D5185(m)		84		
	Barium	ppm	ASTM D5185(m)		0		
	Molybdenum	ppm	ASTM D5185(m)		19		
	Manganese	ppm	ASTM D5185(m)		2		
	Magnesium	ppm	ASTM D5185(m)		183		
	Calcium	ppm	ASTM D5185(m)		2021		
	Phosphorus	ppm	ASTM D5185(m)		875		
	Zinc	ppm	ASTM D5185(m)		884		
	Sulfur	ppm	ASTM D5185(m)		2437		
	Oxidation	Abs/.1mm	ASTM D7414*	>25	11.1		
	\/' O 10000	01					

Visc @ 100°C cSt ASTM D7279(m)

11.4



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 FMC Marine & The Knotical Shop CALA Dh Sample No. : WC0752495 Received 373 Barton St :09 May 2023 Lab Number : 02556170 Tested : 09 May 2023 STONEY CREEK, ON ISO 17025:2017 Accredited : 09 May 2023 - Kevin Marson CA L8E 2L8 Unique Number : 5577210 Diagnosed Laboratory Test Package : MOB 1 (Additional Tests: PQ, Visual) Contact: Lorrie Gruhl To discuss this sample report, contact Customer Service at 1-800-268-2131. lgruhl@fmcgroup.ca T: (905)902-0125 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab. F: Validity of results and interpretation are based on the sample and information as supplied.