



ZF 20080557 - INBOARD - STARBOARD GEARBOX

Sample No: VPA054699
Oil Type: SAE 40W

Sample Number	SAMPLE INFORM	ATION			
Sample Date 07 Jun 2024	Sample Number		VPA054699	 	
Machine Hours 2446	•			 	
Oil Changed Sample Status Not Changd ABNORMAL	•			 	
Sample Status	Oil Hours		0	 	
Sample Status	Oil Changed		Not Changd	 	
Visc @ 40°C cSt 82.3				 	
Vater	OIL CONDITION				
Water % NEG Sodium ppm 256	Visc @ 40°C	cSt	■82.3	 	
Silicon ppm 4 <t< td=""><td>CONTAMINATION</td><td>ı</td><td></td><td></td><td></td></t<>	CONTAMINATION	ı			
Sodium ppm 256 WEAR METALS PQ 27 Iron ppm 52 Copper ppm 6 Lead ppm 6 Aluminum ppm 3 Aluminum ppm 3 Molybdenum ppm 12 Molybdenum ppm <1	Water	%	NEG	 	
Sodium	Silicon	ppm	4	 	
Potassium ppm ■3 WEAR METALS PQ ■27 Iron ppm ■52 Copper ppm ■6 Lead ppm ■5 Aluminum ppm ■3 Aluminum ppm ■1 Chromium ppm ■12 Molybdenum ppm =1 Mickel ppm = 1 Silver ppm <1	Sodium		■256	 	
WEAR METALS PQ 27	Potassium		■ 3	 	
Iron					
Copper ppm ▲ 381	~		_	 	
Lead ppm 6 Tin ppm 5 Aluminum ppm 3 Chromium ppm <1		ppm	_	 	
Tin ppm 5 Aluminum ppm 3		ppm		 	
Aluminum ppm 3		ppm		 	
Chromium ppm -1 Molybdenum ppm 12 Nickel ppm <1		ppm		 	
Molybdenum ppm Nickel ppm <1				 	
Nickel ppm -1 Titanium ppm -1 Silver ppm -1 Manganese ppm -1 Vanadium ppm -1 ADDITIVES Calcium ppm 11897 Magnesium ppm 114 Zinc ppm 883 Phosphorus ppm 779 Barium ppm 0				 	
Titanium			_		
Silver ppm <1			_		
Manganese ppm Vanadium ppm 11 <td< td=""><td></td><td></td><td>_</td><td></td><td></td></td<>			_		
Vanadium ppm <1 ADDITIVES Calcium ppm 1897 Magnesium ppm 114 Zinc ppm 883 Phosphorus ppm 779 Barium ppm 0			· ·		
ADDITIVES Calcium ppm 1897 Magnesium ppm 1114 Zinc ppm 883 Phosphorus ppm 779 Barium ppm 0					
Calcium ppm 1897 Magnesium ppm 114 Zinc ppm 883 Phosphorus ppm 779 Barium ppm 0	Vanadium	ppm	<1	 	
Magnesium ppm 114 Zinc ppm 883 Phosphorus ppm 779 Barium ppm 0	ADDITIVES				
Magnesium ppm 114 Zinc ppm 883 Phosphorus ppm 779 Barium ppm 0	Calcium	ppm	1897	 	
Phosphorus ppm ■779 <t< td=""><td>Magnesium</td><td>ppm</td><td>114</td><td> </td><td></td></t<>	Magnesium	ppm	114	 	
Barium ppm 0	Zinc		■883	 	
	Phosphorus	ppm	779	 	
Boron ppm 126	Barium	ppm	■0	 	
	Boron	ppm	126	 	

CAROLINA MARINE DIESEL

PO BOX 24159 HILTON HEAD, SC US 29925 Contact: KEVIN JACKSON cmdieselsc@gmail.com T: (843)830-9202 F: (843)681-9976

Diagnosis

No corrective action is recommended at this time. We recommend an early resample to monitor this condition. The copper level is abnormal. Clutch disc wear or oil cooler leaching indicated. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

Depot:CARHILSCUnique No:11072473Signed:Jonathan HesterReport Date:13 Jun 2024

OIL ANALYSIS REPORT



