



## JOHN LUGER SAM ONAN G160975823 - GENSET

Sample No: VPA060418

Oil Type: DIESEL ENGINE OIL SAE 15W40

SAMPLE INFORMAT	LIUN			
Sample Number	IION	VPA060419	VDA049022	
		VPA060418 13 Mar 2024	VPA048932	 
Sample Date Machine Hours		0 Niar 2024	24 Apr 2023 2309	 
Oil Hours		0	0	
Oil Changed		Changed NORMAL	Changed NORMAL	 
Sample Status		NORWAL	NORMAL	 
OIL CONDITION				
Visc @ 100°C	cSt	<b>13.4</b>	□13.6	 
Base Number (BN)	mg KOH/g	■9.2	<b>7.9</b>	 
Oxidation (PA)	%	99	83	 
CONTAMINATION				
Water	%	NEG	NEG	 
Soot %	%	■0.2	0.2	 
Nitration (PA)	%	92	84	 
Sulfation (PA)	%	63	57	 
Glycol	%	NEG	NEG	 
Fuel	%	<1.0	<1.0	 
Silicon	ppm	<b>■8</b>	<b>6</b>	 
Sodium	ppm	<b>25</b>	2	 
Potassium	ppm	<b>1</b>	0	 
WEAR METALS				
Iron	ppm	<b>9</b>	<b>1</b> 0	 
Copper	ppm	<b>5</b>	1	 
Lead	ppm	<b>■&lt;1</b>	<b>0</b>	 
Tin	ppm	<1	0	 
Aluminum	ppm	<b>3</b>	<b>2</b>	 
Chromium	ppm	<b>-</b> <1	<b>=</b> <1	 
Molybdenum	ppm	<b>52</b>	<b>□</b> 62	 
Nickel	ppm	<b>■&lt;1</b>	0	 
Titanium	ppm	<b>■&lt;1</b>	<b>0</b>	 
Silver	ppm	<b>0</b>	0	 
Manganese	ppm	<b>■&lt;1</b>	□ < 1	 
Vanadium	ppm	<1	0	 
ADDITIVES				
Calcium	nnm	<b>1460</b>	<b>□</b> 1146	 
Magnesium Magnesium	ppm	<b>1460 144</b>	1087	 
Zinc	ppm	<b>1115</b>		
	ppm	927	□ 1386 □ 1008	 
Phosphorus	ppm	_	□1098 □0	 
Barium	ppm	<b>■</b> 0	0	 
Boron	ppm	<b>27</b>	<b>2</b>	 

Endor Marine LLC - Coastal Marine - 152124 4300 11th Ave. NW SEATTLE, WA US 98107 Contact: WILLOW YANARELLA service@coastalmarineengine.com T: (206)784-3703

F: (206)784-8823

## Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Depot:VP794951Unique No:10937611Signed:Don BaldridgeReport Date:22 Mar 2024

## **OIL ANALYSIS REPORT**



