## **OIL ANALYSIS REPORT**

### ENGEL 520-200 JAY VOLVO PENTA A 1 140931 - STARBOARD DIESEL ENGINE

Sample No: VPA021904

Oil Type: DIESEL ENGINE OIL SAE 40

## SAMPLE INFORMATION

Sample Number		VPA021904	 	
Sample Date		19 Dec 2023	 	
Machine Hours		93	 	
Oil Hours		0	 	
Oil Changed		N/A	 	
Sample Status		NORMAL	 	
OIL CONDITION				
Visc @ 100°C	cSt	13.7	 	
Base Number (BN)	mg KOH/g	<b>10.2</b>	 	
Oxidation (PA)	%	54	 	
CONTAMINATION				
Water	%	NEG	 	
Soot %	%	0.2	 	
Nitration (PA)	%	39	 	
Sulfation (PA)	%	52	 	
Glycol	%	NEG	 	
Fuel	%	<1.0	 	
Silicon	ppm	6	 	
Sodium	ppm		 	
Potassium	ppm	0	 	
WEAR METALS				
Iron	ppm	6	 	
Copper	ppm	2	 	
Lead	ppm	0	 	
Tin	ppm	<1	 	
Aluminum	ppm	<b>1</b>	 	
Chromium	ppm		 	
Molybdenum	ppm	58	 	
Nickel	ppm	0	 	
Titanium	ppm	0	 	
Silver	ppm	0	 	
Manganese	ppm	□<1	 	
Vanadium	ppm	<1	 	
ADDITIVES				
Calcium	ppm	<b>1023</b>	 	
Magnesium	ppm	962	 	
Zinc	ppm	1217	 	
Phosphorus	ppm	1022	 	
Barium	ppm		 	
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Outstanding Marine PO Box 274 GALENA, MD US 21635 Contact: Ronda Bolinger rlwb@verizon.net T:

#### Diagnosis

Resample at the next service interval to monitor.Metal levels are typical for a new component breaking in. 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 suitable for further service.

 Depot:
 VP153685

 Unique No:
 10816289

 Signed:
 Sean Felton

 Report Date:
 04 Jan 2024

ppm

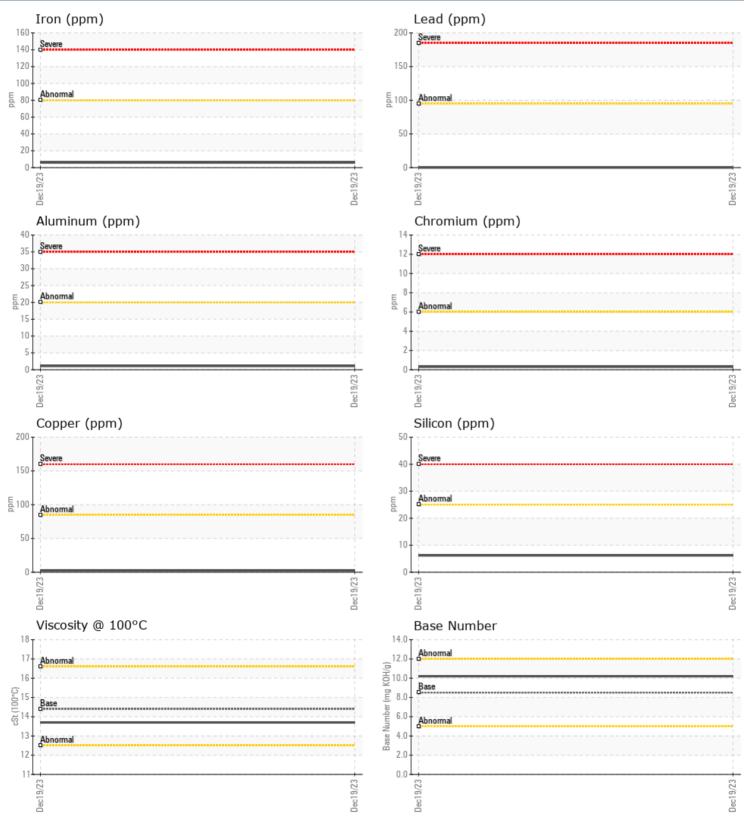
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Contact/Location: Ronda Bolinger - VP153685

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#### GRAPHS



Report Id: VP153685 [WUSCAR] 06050340 (Generated: 01/04/2024 16:25:25) Rev: 1

Contact/Location: Ronda Bolinger - VP153685