# **OIL ANALYSIS REPORT**

## VOLVO PENTA 2006064390 - STARBOARD DIESEL ENGINE

Sample No:VPA051868Oil Type:NOT GIVEN

### SAMPLE INFORMATION

Sample Number Sample Date Machine Hours Oil Hours Oil Changed Sample Status		VPA051868 07 Sep 2023 1050 0 Changed NORMAL	       	   
OIL CONDITION				
Visc @ 100°C Base Number (BN) Oxidation (PA)	cSt mg KOH/g %	13.7 9.4 74	 	
CONTAMINATION				
Soot % Nitration (PA)	%	<b>0.1</b> 75	 	
Sulfation (PA) Glycol	%	60 NEG	 	
Fuel Silicon	% ppm	<1.0	 	
Sodium Potassium	ppm ppm	5 2	 	

# WEAR METALS

Iron	ppm	<b>11</b>	 	
Copper	ppm	7	 	
Lead	ppm	2	 	
Tin	ppm		 	
Aluminum	ppm	2	 	
Chromium	ppm	<b>  </b> <1	 	
Molybdenum	ppm	87	 	
Nickel	ppm		 	
Titanium	ppm	<b></b> <1	 	
Silver	ppm	0	 	
Manganese	ppm	<1	 	
Vanadium	ppm	<1	 	

## ADDITIVES

Calcium	ppm	1429	 	
Magnesium	ppm	946	 	
Zinc	ppm	<b>1255</b>	 	
Phosphorus	ppm	<b>1008</b>	 	
Barium	ppm	0	 	
Boron	ppm	<b>140</b>	 	

#### North Harbor Diesel Inc

720 30Th Street ANACORTES, WA US 98221 Contact: ROBBIN MURDOCK robbin@northharbordiesel.com T: (360)299-1904 F:

### Diagnosis

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.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:
 VP179089

 Unique No:
 10649626

 Signed:
 Sean Felton

 Report Date:
 20 Sep 2023

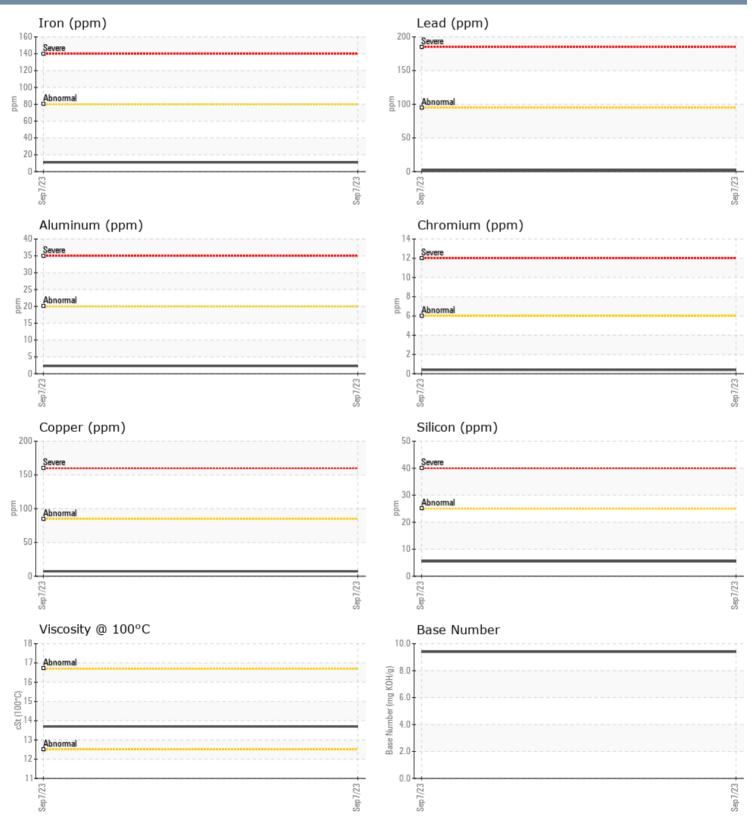


Contact/Location: ROBBIN MURDOCK - VP179089

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#### GRAPHS



Report Id: VP179089 [WUSCAR] 05953667 (Generated: 09/20/2023 11:21:46) Rev: 1

Contact/Location: ROBBIN MURDOCK - VP179089