## **OIL ANALYSIS REPORT**

### SOFTAIL VOLVO PENTA 70112010509 - CENTER DIESEL ENGINE

Sample No: VPA021942

Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3

Sample Number		VPA021942	 	
Sample Date		08 Dec 2023	 	
Machine Hours		179	 	
Oil Hours		0	 	
Oil Changed		N/A	 	
Sample Status		NORMAL	 	
OIL CONDITION				
Visc @ 100°C	cSt	13.2	 	
Base Number (BN)	mg KOH/g	9.2	 	
Oxidation (PA)	%	68	 	
CONTAMINATION				
Water	%	NEG	 	
Soot %	%	0.1	 	
Nitration (PA)	%	57	 	
Sulfation (PA)	%	54	 	
Glycol	%	NEG	 	
Fuel	%	<1.0	 	
Silicon	ppm	<b>1</b> 2	 	
Sodium	ppm	3	 	
Potassium	ppm	2	 	
WEAR METALS				
Iron	ppm	<b>4</b>	 	
Copper	ppm	<b>41</b>	 	
Lead	ppm	<b></b> <1	 	
Tin	ppm	<b>  </b> <1	 	
Aluminum	ppm	2	 	
Chromium	ppm	<b>  </b> <1	 	
Molybdenum	ppm	<b>47</b>	 	
Nickel	ppm	<b>1</b>	 	
Titanium	ppm	<b></b> <1	 	
Silver	ppm	0	 	
Manganese	ppm	<b></b> <1	 	
Vanadium	ppm	0	 	
ADDITIVES				
Calcium	ppm	1087	 	
Magnesium	ppm	<b>789</b>	 	
	ppm	890	 	
Zinc				
	ppm	730	 	
Zinc Phosphorus Barium	ppm ppm	☐ 730 ☐ 11	 	

VOLVO PENTA

FULL KEEL MARINE SERVICES 314 LEGION AVE ANNAPOLIS, MD US 21401 Contact: Service Manager FULLKEELMARINESERIVES@GMAIL.COM T: (410)507-3542

#### Diagnosis

No corrective action is recommended at this time. 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 suitable for further service.

 Depot:
 VP1298996

 Unique No:
 10782375

 Signed:
 Doug Bogart

 Report Date:
 14 Dec 2023

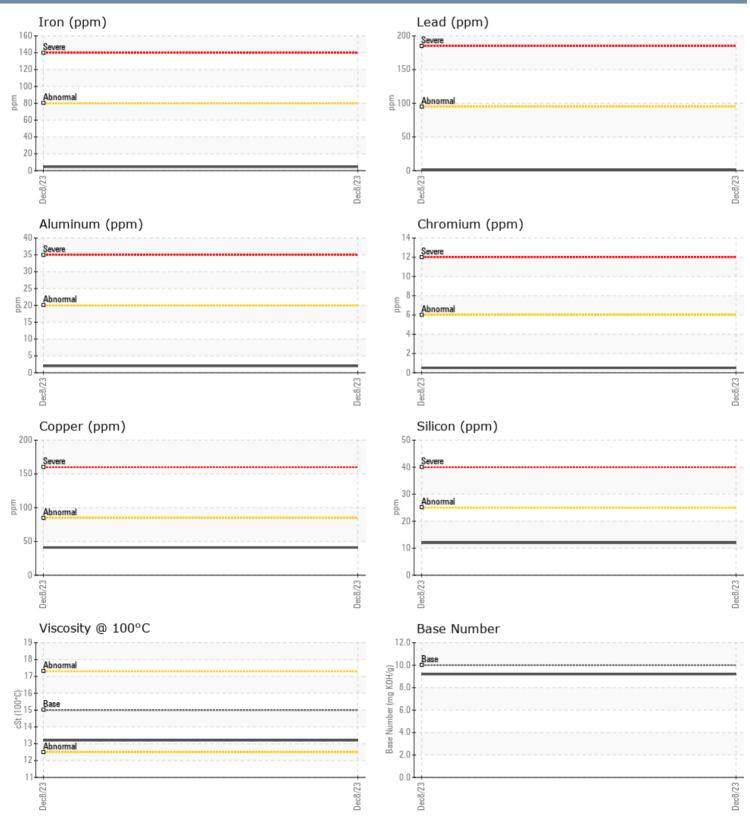
Report Id: VP1298996 [WUSCAR] 06032584 (Generated: 12/14/2023 14:23:10) Rev: 1

Contact/Location: Service Manager - VP1298996

# **OIL ANALYSIS REPORT**



#### GRAPHS



Report Id: VP1298996 [WUSCAR] 06032584 (Generated: 12/14/2023 14:23:12) Rev: 1

Contact/Location: Service Manager - VP1298996