OIL ANALYSIS REPORT

VOLVO PENTA NOT GIVEN VPA051863 - CENTER DIESEL ENGINE 502093

Sample No: VPA051863

Oil Type: CHEVRON DELO 400 MULTIGRADE 15W40

SAMPLE INFORMATION

Sample Number		VPA051863	 	
Sample Date		16 Oct 2023	 	
Machine Hours		1298	 	
Oil Hours		0	 	
Oil Changed		Changed	 	
Sample Status		NORMAL	 	
OIL CONDITION				
Visc @ 100°C	cSt	13.8	 	
Base Number (BN)	mg KOH/g	8.7	 	
Oxidation (PA)	%	53	 	
CONTAMINATION				
Soot %	%	0.1	 	
Nitration (PA)	%	72	 	
Sulfation (PA)	%	49	 	
Glycol	%	NEG	 	
Fuel	%	<1.0	 	
Silicon	ppm	16	 	
Sodium	ppm	3	 	
Potassium	ppm		 	

WEAR METALS

Iron	ppm	1 9	 	
Copper	ppm	3	 	
Lead	ppm	0	 	
Tin	ppm	■<1	 	
Aluminum	ppm	1	 	
Chromium	ppm	 <1	 	
Molybdenum	ppm	5	 	
Nickel	ppm	■ <1	 	
Titanium	ppm	0	 	
Silver	ppm	0	 	
Manganese	ppm	■<1	 	
Vanadium	ppm	0	 	

ADDITIVES

Calcium	ppm	1281	 	
Magnesium	ppm	764	 	
Zinc	ppm	832	 	
Phosphorus	ppm	567	 	
Barium	ppm	0	 	
Boron	ppm	89	 	

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.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: 10711570 Signed: Sean Felton Report Date: 27 Oct 2023

Report Id: VP179089 [WUSCAR] 05988908 (Generated: 10/27/2023 23:15:45) Rev: 1

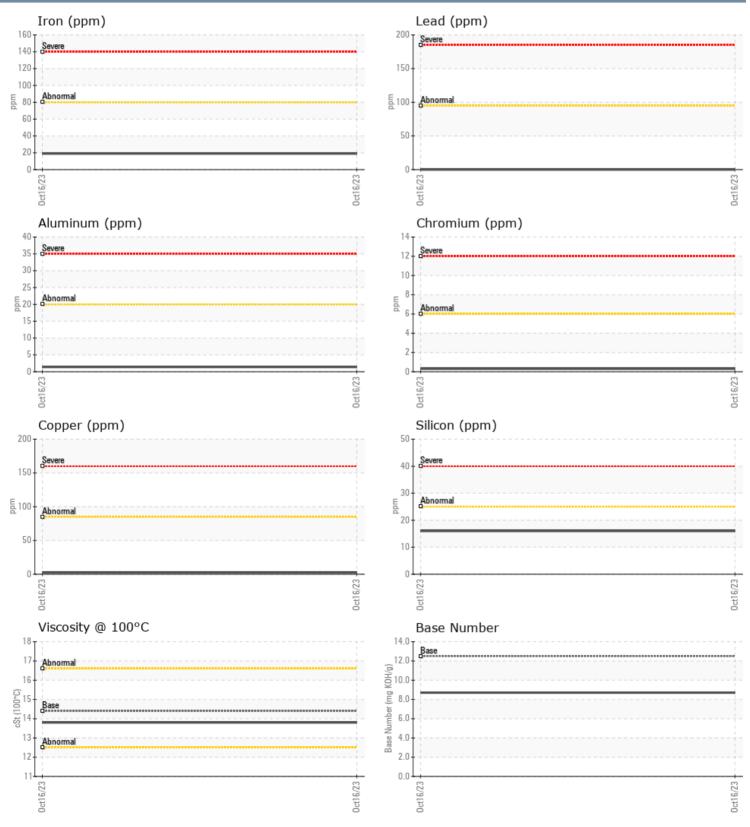
Contact/Location: ROBBIN MURDOCK - VP179089



OIL ANALYSIS REPORT



GRAPHS



Report Id: VP179089 [WUSCAR] 05988908 (Generated: 10/27/2023 23:15:48) Rev: 1

Contact/Location: ROBBIN MURDOCK - VP179089