OIL ANALYSIS REPORT

VOLVO PENTA A720635 - STARBOARD DIESEL ENGINE

Sample No: VPA059952

Oil Type: CHEVRON DELO 400 MULTIGRADE 15W40

Sample Number		VPA059952	 	
Sample Date		07 Dec 2023	 	
Machine Hours		880	 	
Oil Hours		0	 	
Oil Changed		Changed	 	
Sample Status		NORMAL	 	
OIL CONDITION				
Visc @ 100°C	cSt	13.6	 	
Base Number (BN)	mg KOH/g	9.6	 	
Oxidation (PA)	%	63	 	
CONTAMINATION				
Water	%	NEG	 	
Soot %	%	0.3	 	
Nitration (PA)	%	68	 	
Sulfation (PA)	%	55	 	
Glycol	%	NEG	 	
Fuel	%	<1.0	 	
Silicon	ppm	5	 	
Sodium	ppm	0	 	
Potassium	ppm	0	 	
WEAR METALS				
Iron	ppm	1 7	 	
Copper	ppm	9	 	
Lead	ppm	 <1	 	
Tin	ppm	 <1	 	
Aluminum	ppm	2	 	
Chromium	ppm	 <1	 	
Molybdenum	ppm	52	 	
Nickel	ppm	2	 	
Titanium	ppm	0	 	
Silver	ppm	0	 	
Manganese	ppm	■<1	 	
Vanadium	ppm	0	 	
ADDITIVES				
Calcium	ppm	1042	 	
Magnesium	ppm	936	 	
Zinc	ppm	1257	 	
Phosphorus	ppm	1035	 	
Barium	ppm	0	 	
Boron	ppm	6	 	



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

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:
 10789660

 Signed:
 Don Baldridge

 Report Date:
 18 Dec 2023

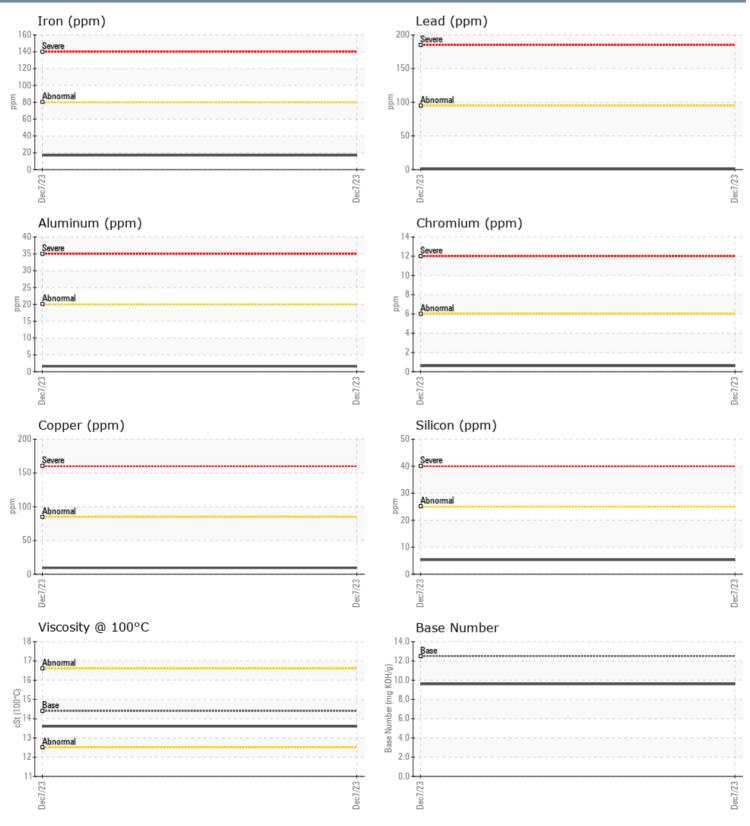
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Contact/Location: ROBBIN MURDOCK - VP179089

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GRAPHS



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