OIL ANALYSIS REPORT

DEPARTMENT OF ECOLOGY/502725 VOLVO PENTA A308513 - PORT DIESEL ENGINE

Sample No: VPA059620

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

Sample Number		VPA059620	 	
Sample Date		27 Feb 2024	 	
Machine Hours		993	 	
Oil Hours		0	 	
Oil Changed		Changed	 	
Sample Status		NORMAL	 	
OIL CONDITION				
Visc @ 100°C	cSt	13.9	 	
Base Number (BN)	mg KOH/g	9.5	 	
Oxidation (PA)	%	60	 	
CONTAMINATION				
CONTAMINATION				
Water	%	NEG	 	
Soot %	%	0.4	 	
Nitration (PA)	%	61	 	
Sulfation (PA)	%	54	 	
Glycol	%	NEG	 	
Fuel	%	<1.0	 	
Silicon	ppm	□7	 	
Sodium	ppm	3	 	
Potassium	ppm	2	 	
WEAR METALS				
Iron	ppm	4 1	 	
Copper	ppm	6	 	
Lead	ppm	3	 	
Tin	ppm	 <1	 	
Aluminum	ppm	50	 	
Chromium	ppm	4	 	
Molybdenum	ppm	54	 	
Nickel	ppm	2	 	
Titanium	ppm	■ <1	 	
Silver	ppm	0	 	
Manganese	ppm	■ <1	 	
Vanadium	ppm	<1	 	
ADDITIVES				
Calcium	ppm	1110	 	
	ppm	913	 	
Magnesium	ppm	1187	 	
Magnesium Zinc	ppin			
	ppm	1082	 	
Zinc		■ 1082 ■ 0	 	

dor Marine LLC - Coastal Marine - 152124 300 11th Ave. NW ATTLE, WA 98107 ontact: WILLOW YANARELLA rvice@coastalmarineengine.com (206)784-3703 (206)784-8823

iagnosis

esample at the next service interval o monitor.All component wear rates re normal. There is no indication of ny contamination in the oil. The BN esult indicates that there is suitable Ikalinity remaining in the oil. The ondition of the oil is acceptable for ne time in service.

epot: VP794951 10910359 nique No: Sean Felton Signed: Report Date: 05 Mar 2024

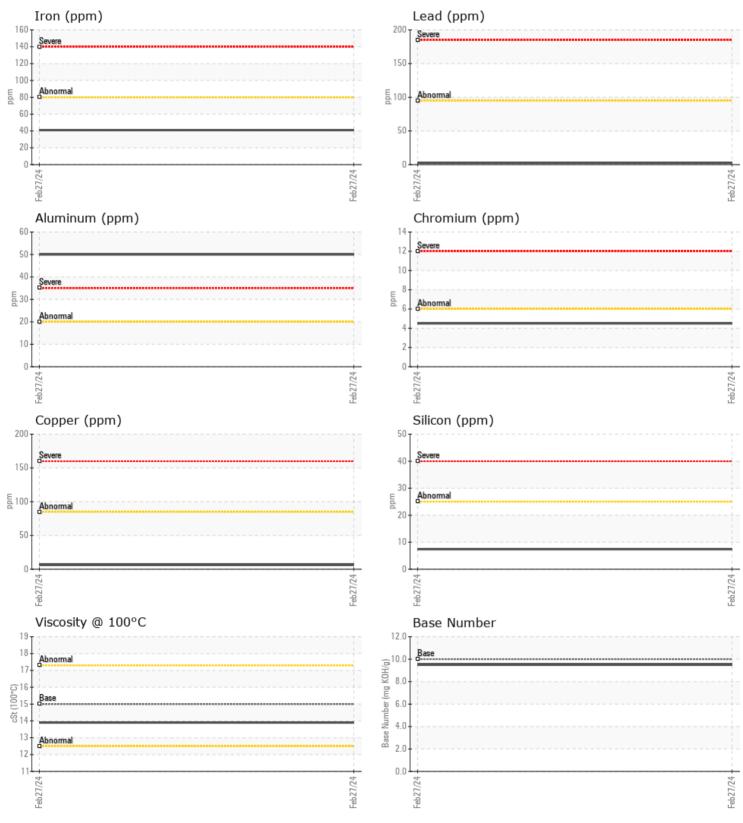
Sunation (FA)	/0	34	 	
Glycol	%	NEG	 	
Fuel	%	<1.0	 	
Silicon	ppm	7	 	
Sodium	ppm	3	 	
Potassium	ppm	2	 	
WEAR METALS				
Iron	ppm	4 1	 	
Copper	ppm	6	 	
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OIL ANALYSIS REPORT



GRAPHS



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Contact/Location: WILLOW YANARELLA - VP794951