



TETRA TECH DILLON VOLVO PENTA A400071 - CENTER DIESEL ENGINE

Sample No: VPA059169

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

SAMPLE INFORMAT	TION			
Sample Number		VPA059169	 	
Sample Date		25 Mar 2024	 	
Machine Hours		1590	 	
Oil Hours		9	 	
Oil Changed		Changed	 	
Sample Status		ATTENTION	 	
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OIL CONDITION				
Visc @ 100°C	cSt	13.8	 	
Base Number (BN)	mg KOH/g	■9.7	 	
Oxidation (PA)	%	61	 	
CONTAMINATION				
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Water	%	NEG	 	
Soot %	%	■ 0.1	 	
Nitration (PA)	%	53	 	
Sulfation (PA)	%	56	 	
Glycol	%	NEG	 	
Fuel	%	<1.0	 	
Silicon	ppm	7	 	
Sodium	ppm	4	 	
Potassium	ppm	2	 	
WEAR METALS				
Iron	ppm	2 3	 	
Copper	ppm	5	 	
Lead		■ <1	 	
Tin	ppm	<1	 	
Aluminum		41	 	
Chromium	ppm	1 2	 	
Molybdenum	ppm	■88	 	
Nickel	ppm	1	 	
Titanium	ppm	1 <1	 	
Silver	ppm	■<1 ■<1	 	
Manganese	ppm	■ <1	 	
Vanadium	ppm	<1	 	
Variacium	ррпп	~1		
ADDITIVES				
Calcium	ppm	1303	 	
Magnesium	ppm	764	 	
Zinc	ppm	1024	 	
Phosphorus	ppm	■ 853	 	
Barium	ppm	■ 0	 	
Boron	ppm	188	 	

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Diagnosis

No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. The aluminum level is abnormal. All other 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:VP794951Unique No:10951189Signed:Don BaldridgeReport Date:02 Apr 2024

OIL ANALYSIS REPORT



