

Sample No: VCP444473

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

Job No: SWO-069917 APAC AL

SAMPLE	INFORMATION				
Sample Number	-	VCP444473	VCP297126	VCP292214	VCP285503
Sample Date		22 Feb 2024	05 Feb 2021	18 Nov 2020	24 Aug 2020
Machine Hours		7119	4099	3253	3140
Oil Hours		0	0	0	0
Oil Changed		Changed	Changed	Changed	Changed
Sample Status		NORMAL	NORMAL	NORMAL	ABNORMAL
OIL CON	DITION				
Visc @ 100°C	cSt	13.3	13.4	□ 13.0	□13.1
Base Number (BN	I) mg KOH/g	6.4			
Oxidation (PA)	%	53	70	52	56
CONTAM	IINATION				
Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.2	□ 0.1	□ 0.1	□0.2
Nitration (DA)	0/	60	61	60	60

CONTAMINATION						
Water	%	NEG	NEG	NEG	NEG	
Soot %	%	■ 0.2	□ 0.1	□ 0.1	0.2	
Nitration (PA)	%	69	61	68	69	
Sulfation (PA)	%	52	60	55	56	
Glycol	%	NEG	NEG	NEG	NEG	
Fuel	%	<1.0	<1.0	<1.0	<1.0	
Silicon	ppm	4	□0	□ 5	5	
Sodium	ppm	1	_2	■ 3	1	
Potassium	ppm	0	1	2	2	

VOLVO						
WEAR METALS						
Iron	ppm	■2	7	5	<u></u> 5	
Copper	ppm	■1	4	■ 18	▲ 89	
Lead	ppm	0	< 1	0	< 1	
Tin	ppm	■0	- <1	□0		
Aluminum	ppm	2	< 1	1	0	
Chromium	ppm	■0	- <1	□0	- <1	
Molybdenum	ppm	■84	2 5	5	■ 8	
Nickel	ppm	■0	- <1	□0	0	
Titanium	ppm	0	< 1	<1	<1	
Silver	ppm	■0	<1	0	<1	
Manganese	ppm	0	< 1	<1	<1	
Vanadium	ppm	0	0	0	0	

ADDITIVES					
Calcium	ppm	1946	■1596	1419	■1302
Magnesium	ppm	96	553	□782	664
Zinc	ppm	1180	■972	■818	■826
Phosphorus	ppm	1022	■871	745	709
Barium	ppm	■ 0	0	0	□0
Boron	ppm	104	6 0	■53	57
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COWIN EQUIPMENT COMPANY

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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 suitable for further service.

Depot:VOLVO8528Unique No:10899513Signed:Jonathan HesterReport Date:28 Feb 2024



CONSTRUCTION EQUIPMENT





