



[SPM659984-10] Machine Id VOLVO EC300EL 314537 Component Diesel Engine

VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (--- GAL)

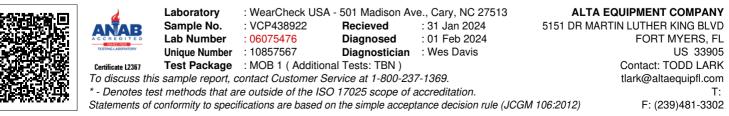
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RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		VCP438922	VCP403389	
	Sample Date		Client Info		19 Jan 2024	31 Aug 2023	
	Machine Age	hrs	Client Info		3470	2882	
	Oil Age	hrs	Client Info		0	0	
	Filter Age	hrs	Client Info		0	0	
	Oil Changed		Client Info		N/A	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	NORMAL	
WEAR All component wear rates are normal.	Iron	ppm	ASTM D5185m	>100	6	8	
	Chromium	ppm	ASTM D5185m		<1	<1	
	Nickel	ppm	ASTM D5185m		<1	0	
	Titanium	ppm	ASTM D5185m	210	<1	<1	
	Silver		ASTM D5185m	-2	<1	0	
	Aluminum	ppm	ASTM D5185m		6	6	
	Lead	ppm	ASTM D5185m	>20	1	1	
		ppm	ASTM D5185m		2	2	
	Copper Tin	ppm	ASTM D5185m			1	
		ppm		>10	1		
	Vanadium	ppm	ASTM D5185m	NONE	<1	<1	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185m	>20	6	6	
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	11	11	
	Fuel		WC Method	>6.0	<1.0	0.4	
	Water		WC Method	>0.1	NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	*ASTM D7844	>3	0.1	0.1	
	Nitration	Abs/cm	*ASTM D7624	>20	7.1	7.5	
	Sulfation	Abs/.1mm	*ASTM D7415	>30	21.4	18.8	
	Silt	scalar	*Visual	NONE	NONE	NONE	
	Debris	scalar	*Visual	NONE	NONE	NONE	
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
	Appearance	scalar	*Visual	NORML	NORML	NORML	
	Odor	scalar	*Visual	NORML	NORML	NORML	
	Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185m		3	3	
	Boron	ppm	ASTM D5185m	25	41	56	
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium		ASTM D5185m		0	0	
	Molybdenum	ppm ppm	ASTM D5185m		48	49	
	Manganese		ASTM D5185m		40 <1	49 <1	
	Magnesium	ppm	ASTM D5185m		515	645	
	Calcium	ppm	ASTM D5185m	2057	1542	1753	
		ppm	ASTM D5185m			908	
	Phosphorus	ppm			953		
	Zinc	ppm	ASTM D5185m	1223	1106	1144	
	Sulfur	ppm	ASTM D5185m		2902	3394	
	Oxidation	Abs/.1mm	*ASTM D7414		19.9	16.2	
	Base Number (BN)	mg KOH/g	ASTM D2896	10	10.4	9.5	

Visc @ 100°C cSt ASTM D445 15.0

12.3

12.6





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Contact/Location: TODD LARK - VOLVO0090

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