WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL NORMAL



Area [389912]

VOLVO EC250E 314186

Component Diesel Engine

Test	DIESEL ENGINE OIL SAE 15W40 (GAL)								
Resample at the next service interval to monitor. Sample Number Client Info 29 bec 202 50 Jul 202	RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2	
Sample Date Client Info 2000 1100		Sample Number		Client Info			VCP333668		
Dil Age hrs Client Info 0	riesample at the flext service interval to monitor.	Sample Date		Client Info		29 Dec 2023	05 Jul 2022		
Filter Age		Machine Age	hrs	Client Info		2000	1100		
Oil Changed Client Info Changed Change		Oil Age	hrs	Client Info		500	500		
Filter Changed		Filter Age	hrs	Client Info		0	0		
No		Oil Changed		Client Info		Changed	Changed		
Iron		Filter Changed		Client Info		Changed	N/A		
Chromium Chromium		Sample Status				NORMAL	NORMAL		
Nickel ppm ASTM D5185/m >10 <1 1 Titanium ppm ASTM D5185/m >2 0 <1 Titanium ppm ASTM D5185/m >2 0 <1 Aluminum ppm ASTM D5185/m >2 0 <1 Aluminum ppm ASTM D5185/m >2 0 <1 Aluminum ppm ASTM D5185/m >2 0 <1 <1 Copper ppm ASTM D5185/m >10 <1 <1 Copper ppm ASTM D5185/m >10 <1 <1 Copper ppm ASTM D5185/m >10 <1 <1 There is no indication of any contamination in the oil. Potassium ppm ASTM D5185/m >2 7 8 Fuel WC Method >6 0 <1 0 <1 Water WC Method >6 0 <1 0 <1 Water WC Method >6 0 <1 0 <1 NEG NEG Soulf % % % ASTM D7847 >3 0 0 Sulfation Abs/m ASTM D7847 >3 0 0 Sulfation Abs/m ASTM D7847 >3 0 0 Fuel WC Method >6 NEG NEG Sulfation Abs/m ASTM D7847 >3 0 0 Fuel WC Method >6 NEG Sulfation Abs/m ASTM D7847 >3 0 0 Fuel WC Method >6 NEG Sulfation Abs/m ASTM D7847 >3 0 0 Fuel WC Method >6 NEG Sulfation Abs/m ASTM D7847 >3 0 0 Fuel WC Method >6 NEG Fuel WC Method >6 NEG Sulfation Abs/m ASTM D7847 >3 0 0 Fuel WC Method >6 NEG Sulfation Abs/m ASTM D7847 >3 0 0 Fuel WC Method >6 NEG Sulfation Abs/m ASTM D7848 >3 0 0 Fuel WC Method >6 NEG Fuel WC Method >6 NEG Sulfation ASTM D5185/m 10 0 41 36 Fuel WC Method >6 NEG Fuel WC Method >6 NEG Sulfation ASTM D5185/m 10 0 41 36 Fuel WC Method >6 NEG Fuel WC Method >6 NEG Fuel WC Method >6 NEG Sulfation ASTM D5185/m 10 0 41 36	WEAR	Iron	ppm	ASTM D5185(m)	>100	8	9		
Nicke ppm ASTM D5186m 0	All component wear rates are normal.	Chromium	ppm	ASTM D5185(m)	>10	<1	<1		
Silver ppm ASTM D5185 m >2 0 <1		Nickel	ppm	ASTM D5185(m)	>10	<1	1		
Aluminum ppm ASTM D5185m >10 5 3		Titanium	ppm	ASTM D5185(m)		0	<1		
Lead		Silver	ppm	ASTM D5185(m)	>2	0	<1		
Copper		Aluminum	ppm	ASTM D5185(m)	>10	5	3		
Tin ppm ASTM DS186(m) >10 <1 <1 Vanadium ppm ASTM DS186(m) >20 7 8 There is no indication of any contamination in the oil.		Lead	ppm	ASTM D5185(m)	>20	<1	<1		
Vanadium ppm ASTM D5185(m) 20 0 0 0 0 0 0 0 0		Copper	ppm	ASTM D5185(m)	>15	2	6		
Silicon ppm ASTM D5185(m) >20 7 8		Tin	ppm	ASTM D5185(m)	>10	<1	<1		
Potassium ppm ASTM D5/85[m] >20 3 2		Vanadium	ppm	ASTM D5185(m)		0	0		
Potassium ppm ASTM 05/85(m) >20 3 2	CONTAMINATION	Silicon	mag	ASTM D5185(m)	>20	7	8		
Fuel WC Method >6.0 <1.0 <1.0 <		Potassium				3			
Glycol	There is no indication of any contamination in the oil.	Fuel				<1.0	<1.0		
Soot %		Water					NEG		
Nitration		Glycol		WC Method		NEG	NEG		
Sulfation Abs/.1mm ASTM D7415* >30 22.9 23.2		Soot %	%	ASTM D7844*	>3	0	0		
Emulsified Water Scalar Visual* >0.1 NEG NEG		Nitration	Abs/cm	ASTM D7624*	>20	7.1	7.2		
Sodium ppm ASTM D5185(m) >158 2 3		Sulfation	Abs/.1mm	ASTM D7415*	>30	22.9	23.2		
Boron ppm ASTM D5185(m) 250 44 33		Emulsified Water	scalar	Visual*	>0.1	NEG	NEG		
Boron ppm ASTM D5185(m) 250 44 33	FLUID CONDITION	Sodium	ppm	ASTM D5185(m)	>158	2	3		
Barium ppm ASTM D5185(m) 10 0 <1	The condition of the oil is acceptable for the time in service.	Boron		ASTM D5185(m)	250	44	33		
Molybdenum ppm ASTM D5185(m) 100 41 36 Manganese ppm ASTM D5185(m) 0 <1 Magnesium ppm ASTM D5185(m) 450 506 495 Calcium ppm ASTM D5185(m) 3000 1739 1709 Phosphorus ppm ASTM D5185(m) 1150 935 929 Zinc ppm ASTM D5185(m) 1350 1087 1089 Sulfur ppm ASTM D5185(m) 4250 2582 2572 Oxidation Abs/.1mm ASTM D7414* >25 20.9		Barium	ppm	ASTM D5185(m)	10	0	<1		
Magnesium ppm ASTM D5185(m) 450 506 495 Calcium ppm ASTM D5185(m) 3000 1739 1709 Phosphorus ppm ASTM D5185(m) 1150 935 929 Zinc ppm ASTM D5185(m) 1350 1087 1089 Sulfur ppm ASTM D5185(m) 4250 2582 2572 Oxidation Abs/.1mm ASTM D7414* >25 20.9		Molybdenum		ASTM D5185(m)	100	41	36		
Calcium ppm ASTM D5185(m) 3000 1739 1709 Phosphorus ppm ASTM D5185(m) 1150 935 929 Zinc ppm ASTM D5185(m) 1350 1087 1089 Sulfur ppm ASTM D5185(m) 4250 2582 2572 Oxidation Abs/.1mm ASTM D7414* >25 20.9 20.9		Manganese	ppm	ASTM D5185(m)		0	<1		
Phosphorus ppm ASTM D5185(m) 1150 935 929 Zinc ppm ASTM D5185(m) 1350 1087 1089 Sulfur ppm ASTM D5185(m) 4250 2582 2572 Oxidation Abs/.1mm ASTM D7414* >25 20.9		Magnesium	ppm	ASTM D5185(m)	450	506	495		
Zinc ppm ASTM D5185(m) 1350 1087 1089 Sulfur ppm ASTM D5185(m) 4250 2582 2572 Oxidation Abs/.1mm ASTM D7414* >25 20.9		Calcium	ppm	ASTM D5185(m)	3000	1739	1709		
Sulfur ppm ASTM D5185(m) 4250 2582 2572 Oxidation Abs/.1mm ASTM D7414* >25 20.9 20.9		Phosphorus	ppm	ASTM D5185(m)	1150	935	929		
Oxidation		Zinc	ppm	ASTM D5185(m)	1350	1087	1089		
		Sulfur	ppm	ASTM D5185(m)	4250	2582	2572		
Visc @ 100°C cSt ASTM D7279(m) 14.4 12.7 13.2		Oxidation	Abs/.1mm	ASTM D7414*	>25	20.9	20.9		
		Visc @ 100°C	cSt	ASTM D7279(m)	14.4	12.7	13.2		





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number

: VCP394395 : 02610535 Unique Number : 5711621 Test Package : MOB 1

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Recieved : 23 Jan 2024 : 23 Jan 2024 Diagnosed Diagnostician : Wes Davis

To discuss this sample report, contact Customer Service at 1-800-268-2131. Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

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