

WEAR SEVERE CONTAMINATION SEVERE FLUID CONDITION NORMAL



VOLVO EC750 310137

Rear Left Final Drive

VOLVO PREMIUM GEAR OIL 85W-140 GL-5 (--- GAL)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

WEAR

Gear wear is indicated.

CONTAMINATION

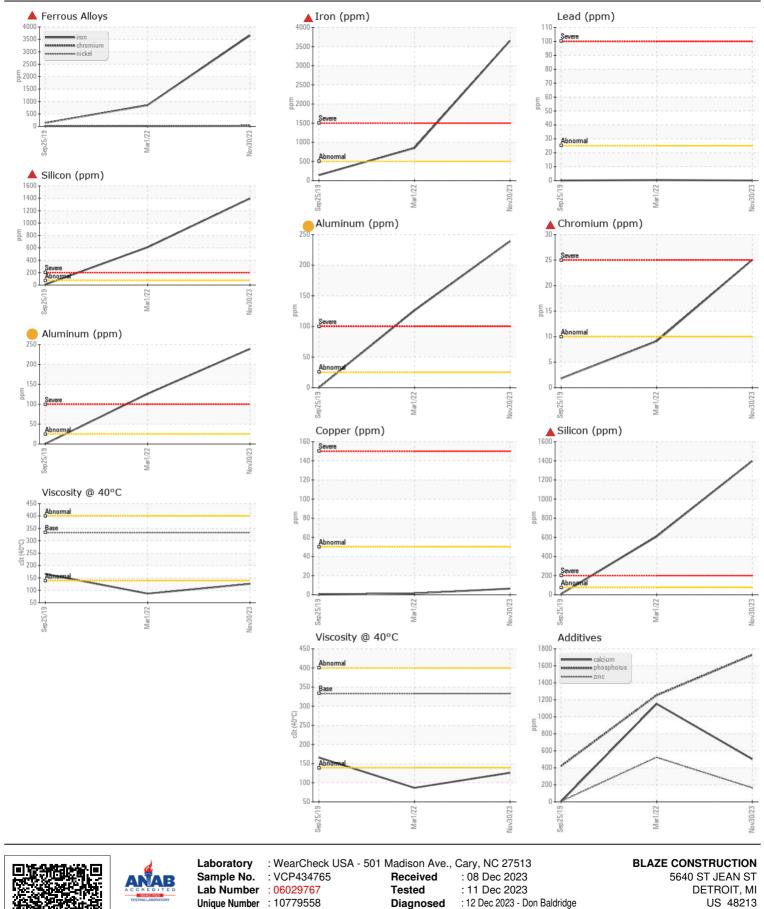
Elemental levels of silicon (Si) and aluminum (AI) indicate aluminasilicate (coarse dirt) ingress.

FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP434765	VCP361870	VCP255627
Sample Date		Client Info		30 Nov 2023	01 Mar 2022	25 Sep 2019
Machine Age	hrs	Client Info		6059	4065	528
Oil Age	hrs	Client Info		2000	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				SEVERE	SEVERE	NORMAL
Iron	ppm	ASTM D5185m	>500	a 3654	▲ 850	141
Chromium	ppm	ASTM D5185m	>10	4 25	9	2
Nickel	ppm	ASTM D5185m	>10	2	<1	<1
Titanium	ppm	ASTM D5185m		12	6	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	<u> </u>	126	<1
Lead	ppm	ASTM D5185m	>25	0	<1	0
Copper	ppm	ASTM D5185m	>50	6	1	<1
Tin	ppm	ASTM D5185m	>10	<1	<1	0
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
		*) // 1	NONE		NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>75	NONE	NONE ▲ 609	7
Silicon	ppm	ASTM D5185m	>75	1 397	▲ 609	7
Silicon Potassium	ppm	ASTM D5185m ASTM D5185m	>75 >20	▲ 1397 91	▲ 609 40	7 0
Silicon Potassium Water	ppm ppm	ASTM D5185m ASTM D5185m WC Method	>75 >20 >0.2	▲ 1397 91 NEG	▲ 609 40 NEG	7 0 NEG
Silicon Potassium Water Silt	ppm ppm scalar	ASTM D5185m ASTM D5185m WC Method *Visual	>75 >20 >0.2 NONE	 1397 91 NEG NONE 	▲ 609 40 NEG LIGHT	7 0 NEG LIGHT
Silicon Potassium Water Silt Debris	ppm ppm scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual	>75 >20 >0.2 NONE NONE	 1397 91 NEG NONE NONE 	▲ 609 40 NEG LIGHT NONE	7 0 NEG LIGHT NONE
Silicon Potassium Water Silt Debris Sand/Dirt	ppm ppm scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual	>75 >20 >0.2 NONE NONE NONE	 1397 91 NEG NONE NONE NONE 	 ▲ 609 40 NEG LIGHT NONE NONE 	7 0 NEG LIGHT NONE NONE NORML
Silicon Potassium Water Silt Debris Sand/Dirt Appearance	ppm ppm scalar scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual	>75 >20 >0.2 NONE NONE NONE NORML	 1397 91 NEG NONE NONE NONE NORML 	 609 40 NEG LIGHT NONE NORML 	7 0 NEG LIGHT NONE NONE NORML
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor	ppm ppm scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual	>75 >20 >0.2 NONE NONE NONE NORML NORML	 1397 91 NEG NONE NONE NONE NORE NORML NORML 	 609 40 NEG LIGHT NONE NONE NORML NORML 	7 0 NEG LIGHT NONE NONE NORML NORML
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water	ppm ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual	>75 >20 >0.2 NONE NONE NONE NORML NORML	 1397 91 NEG NONE NONE NORE NORML NEG 	 609 40 NEG LIGHT NONE NONE NORML NORML NEG 	7 0 NEG LIGHT NONE NONE NORML NORML NEG
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium	ppm ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m	>75 >20 >0.2 NONE NONE NORML NORML >0.2	 1397 91 NEG NONE NONE NORML NORML NEG 38 	 609 40 NEG LIGHT NONE NORML NORML NEG 14 	7 0 NEG LIGHT NONE NONE NORML NORML NEG 2
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron	ppm ppm scalar scalar scalar scalar scalar scalar gpm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m	>75 >20 >0.2 NONE NORME NORML >0.2	 1397 91 NEG NONE NONE NORML NORML NEG 38 110 	 609 40 NEG LIGHT NONE NORML NORML NEG 14 95 	7 0 NEG LIGHT NONE NORML NORML NEG 2 4
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium	ppm ppm scalar scalar scalar scalar scalar scalar ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m	>75 >20 >0.2 NONE NONE NORML NORML >0.2	 1397 91 NEG NONE NONE NORML NORML NORML NEG 38 110 2 	 609 40 NEG LIGHT NONE NORML NORML NORML NEG 14 95 0 	7 0 NEG LIGHT NONE NORML NORML NEG 2 4 11
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum	ppm ppm scalar scalar scalar scalar scalar scalar ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m	>75 >20 >0.2 NONE NORML NORML >0.2 1111 0.0	 1397 91 NEG NONE NONE NORML NORML NEG 38 110 2 8 	 609 40 NEG LIGHT NONE NORML NORML NEG 14 95 0 23 	7 0 NEG LIGHT NONE NORML NORML NEG 2 4 11
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese	ppm ppm scalar scalar scalar scalar scalar scalar ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>75 >20 >0.2 NONE NORME NORML >0.2 1111 0.0 0.9 0.9	 1397 91 NEG NONE NONE NORML NORML NEG 38 110 2 8 29 	 609 40 NEG LIGHT NONE NORML NORML NEG 14 95 0 23 11 	7 0 NEG LIGHT NONE NORML NORML NEG 2 4 11 0 3
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium	ppm ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>75 >20 >0.2 NONE NONE NORML >0.2 1111 0.0 0.9 0.0 39	 1397 91 NEG NONE NONE NORML NORML NEG 38 110 2 8 29 168 	 609 40 NEG LIGHT NONE NORML NORML NEG 14 95 0 23 11 307 	7 0 NEG LIGHT NONE NORML NORML NEG 2 4 11 0 3 0
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium	ppm ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>75 >20 >0.2 NONE NORML NORML >0.2 1111 0.0 0.9 0.0 39 93	 1397 91 NEG NONE NONE NORML NORML NEG 38 110 2 8 29 168 503 	 609 40 NEG LIGHT NONE NORML NORML NEG 14 95 0 23 11 307 1152 	7 0 NEG LIGHT NONE NORML NORML NEG 2 4 11 0 3 0 3 0
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>75 >20 >0.2 NONE NORME NORML >0.2 1111 0.0 0.9 0.0 39 93	 1397 91 NEG NONE NONE NORML NORML NEG 38 110 2 8 29 168 503 1727 	 609 40 NEG LIGHT NONE NORML NORML NEG 14 95 0 23 11 307 1253 	7 0 NEG LIGHT NONE NORML NORML NEG 2 4 11 0 3 0 4 4 4 2

Contact/Location: DAVE WARD - BLADET



T: (248)632-2317

F: