

[W02008143] Machine Id VOLVO EC350E 314605 Component Left Travel Fluid GEAR OIL SAE 80W90 (2 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. Resample at the next service interval to monitor. (Customer Sample Comment: W02008143)

WEAR

All component wear rates are normal.

CONTAMINATION

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

FLUID CONDITION

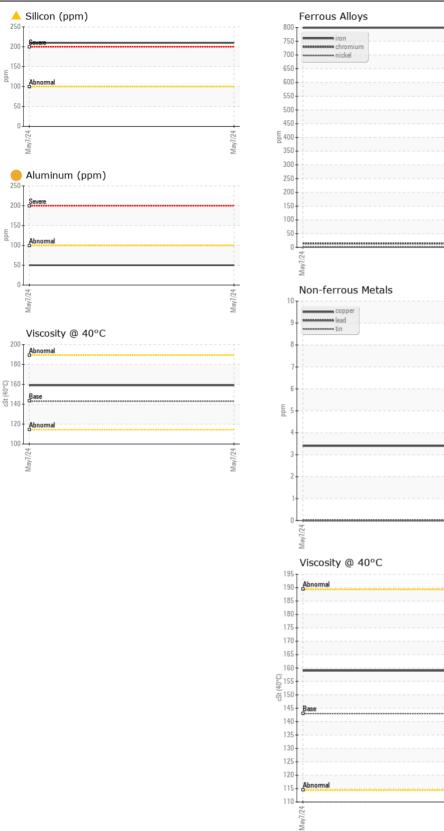
The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ML0001087		
Sample Date		Client Info		07 May 2024		
Machine Age	hrs	Client Info		500		
Oil Age	hrs	Client Info		500		
Filter Age	hrs	Client Info		0		
Oil Changed		Client Info		Changed		
Filter Changed		Client Info		N/A		
Sample Status				ABNORMAL		
			4000	700		
Iron	ppm	ASTM D5185m	>1200	799		
Chromium	ppm	ASTM D5185m	>20	14		
Nickel	ppm	ASTM D5185m	>5	<1		
Titanium	ppm	ASTM D5185m		6		
Silver	ppm	ASTM D5185m	100	0		
Aluminum	ppm	ASTM D5185m	>100	5 0		
Lead	ppm	ASTM D5185m	>50	0		
Copper	ppm	ASTM D5185m	>50	3		
Tin	ppm	ASTM D5185m	>5	0		
Vanadium	ppm	ASTM D5185m		<1		
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Yellow Metal Silicon	scalar ppm	*Visual ASTM D5185m	NONE >100	NONE		
Silicon	ppm	ASTM D5185m	>100	2 10	 	
Silicon Potassium	ppm	ASTM D5185m ASTM D5185m	>100 >20	▲ 210 8	 	
Silicon Potassium Water	ppm ppm	ASTM D5185m ASTM D5185m WC Method	>100 >20 >0.25	▲ 210 8 NEG		
Silicon Potassium Water Silt	ppm ppm scalar	ASTM D5185m ASTM D5185m WC Method *Visual	>100 >20 >0.25 NONE	210 8 NEG MODER		
Silicon Potassium Water Silt Debris	ppm ppm scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual	>100 >20 >0.25 NONE NONE	 210 8 NEG MODER NONE 		
Silicon Potassium Water Silt Debris Sand/Dirt	ppm ppm scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual	>100 >20 >0.25 NONE NONE NONE	 210 8 NEG MODER NONE NONE 		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance	ppm ppm scalar scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual	>100 >20 >0.25 NONE NONE NONE NORML	 210 8 NEG MODER NONE 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	>100 >20 >0.25 NONE NONE NONE NORML NORML >0.25	 210 8 NEG MODER NONE NORML NORML NEG 		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium	ppm ppm scalar scalar scalar scalar scalar scalar ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m	>100 >20 >0.25 NONE NONE NORML NORML >0.25	 210 8 NEG MODER NONE NORML NORML NEG 7 		
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	>100 >20 >0.25 NONE NONE NORML >0.25 >170 400	 210 8 NEG MODER NONE NORML NORML NEG 7 12 		
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	>100 >20 >0.25 NONE NONE NORML NORML >0.25 >170 400 200	 210 8 NEG MODER NONE NORML NORML NEG 7 12 1 		
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 ASTM D5185m	>100 >20 >0.25 NONE NONE NORML >0.25 >170 400	 210 8 NEG MODER NONE NORML NORML NEG 7 12 1 2 		
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 ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>100 >20 >0.25 NONE NORME NORML >0.25 >170 400 200 12	 210 8 NEG MODER NONE NORML NORML NEG 7 12 1 2 10 		
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	>100 >20 >0.25 NONE NONE NORML >0.25 >170 400 200 12	 210 8 NEG MODER NONE NORML NORML NEG 7 12 1 2 10 9 		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Malybdenum 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	>100 >20 >0.25 NONE NORML NORML >0.25 >170 400 200 12	 210 8 NEG MODER NONE NORML NORML NEG 7 12 1 2 10 9 50 		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium 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	 >100 >20 >0.25 NONE NORM NORML >0.25 >170 400 200 12 150 1650 	 210 8 NEG MODER NONE NORML NORML NEG 7 12 1 2 10 9 50 400 		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Malybdenum Manganese Magnesium Calcium	ppm ppm scalar scalar scalar scalar scalar ppm 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 ASTM D5185m	 >100 >20 >0.25 NONE NONE NORML >0.25 >170 400 200 12 150 1650 125 	 210 8 NEG MODER NONE NORML NORML NEG 7 12 1 2 10 9 50 400 21 		
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	 >100 >20 >0.25 NONE NORM NORML >0.25 >170 400 200 12 150 1650 	 210 8 NEG MODER NONE NORML NORML NEG 7 12 1 2 10 9 50 400 		

Submitted By: DARRELL ANDES

Page 1 of 2

WEAR ATTENTION CONTAMINATION ABNORMAL FLUID CONDITION NORMAL



May7/24 MCCLUNG-LOGAN EQUIPMENT CO - MANASSAS : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received 8450 QUARRY ROAD :09 May 2024 Tested MANASSAS, VA : 10 May 2024 Diagnosed : 13 May 2024 - Don Baldridge US 20110 Contact: MIKE MAYHUGH MMAYHUGH@MCCLUNG-LOGAN.COM To discuss this sample report, contact Customer Service at 1-800-237-1369. * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (703)393-7344 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (703)393-7844

/lav7//24



Laboratory

Sample No.

Lab Number : 06174357

: ML0001087

Submitted By: DARRELL ANDES Page 2 of 2