WEAR CONTAMINATION FLUID CONDITION

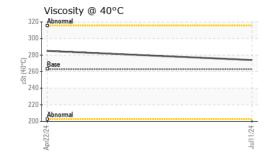
NORMAL NORMAL

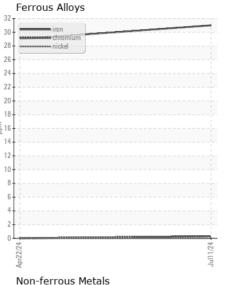


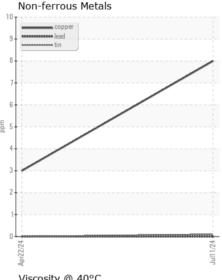
VOLVO A30G 340072 Component Bogie/Center Axle

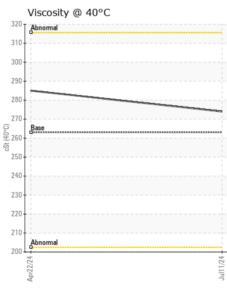
GEAR OIL SAE 80W140 (--- GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		ML0946569	ML0000984	
	Sample Date		Client Info		11 Jul 2024	22 Apr 2024	
	Machine Age	hrs	Client Info		11600	11356	
	Oil Age	hrs	Client Info		0	11356	
	Filter Age	hrs	Client Info		0	0	
	Oil Changed		Client Info		N/A	N/A	
	Filter Changed		Client Info		N/A	N/A	
	Sample Status				NORMAL	NORMAL	
WEAR	Iron	ppm	ASTM D5185m	>900	31	29	
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		<1	0	
	Nickel	ppm	ASTM D5185m		0	0	
	Titanium	ppm	ASTM D5185m	>10	<1	0	
	Silver	ppm	ASTM D5185m		<1	0	
	Aluminum	ppm	ASTM D5185m	>30	3	0	
	Lead	ppm	ASTM D5185m		0	0	
	Copper	ppm	ASTM D5185m		8	3	
	Tin	ppm	ASTM D5185m	>20	<1	0	
	Vanadium	ppm	ASTM D5185m		<1	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
		000.0.	Vioudi	14014		INOINE	
CONTAMINATION							
CONTAMINATION	Silicon	ppm	ASTM D5185m	>50	4	4	
CONTAMINATION There is no indication of any contamination in the oil.	Silicon Potassium		ASTM D5185m ASTM D5185m	>50			
_	Silicon	ppm	ASTM D5185m	>50 >20	4	4 0	
	Silicon Potassium Water	ppm	ASTM D5185m ASTM D5185m WC Method	>50 >20 >0.2	4 1 NEG	4 0 NEG	
	Silicon Potassium Water Silt	ppm ppm scalar	ASTM D5185m ASTM D5185m WC Method *Visual	>50 >20 >0.2 NONE	4 1 NEG NONE	4 0 NEG NONE	
	Silicon Potassium Water Silt Debris	ppm ppm scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual	>50 >20 >0.2 NONE NONE	4 1 NEG NONE NONE	4 0 NEG NONE NONE	
	Silicon Potassium Water Silt Debris Sand/Dirt	ppm ppm scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual	>50 >20 >0.2 NONE NONE	4 1 NEG NONE NONE	4 0 NEG NONE NONE	
	Silicon Potassium Water Silt Debris Sand/Dirt Appearance	ppm ppm scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual	>50 >20 >0.2 NONE NONE NONE NONE	4 1 NEG NONE NONE NONE NONE	4 0 NEG NONE NONE NONE NONE	
There is no indication of any contamination in the oil.	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	>50 >20 >0.2 NONE NONE NONE NORML	4 1 NEG NONE NONE NONE NONE NORML	4 0 NEG NONE NONE NONE NONE NORML	
There is no indication of any contamination in the oil. FLUID CONDITION	Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water	ppm ppm scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>50 >20 >0.2 NONE NONE NONE NORML NORML >0.2	4 1 NEG NONE NONE NONE NORML NORML NEG	4 0 NEG NONE NONE NONE NORML NORML NEG	
There is no indication of any contamination in the oil.	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	>50 >20 >0.2 NONE NONE NORML NORML >0.2	4 1 NEG NONE NONE NONE NORML NORML NEG	4 0 NEG NONE NONE NONE NORML NORML NEG 0	
There is no indication of any contamination in the oil. FLUID CONDITION	Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron	ppm ppm scalar scalar scalar scalar scalar ppm ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual *Visual *ASTM D5185m	>50 >20 >0.2 NONE NONE NORML NORML >0.2	4 1 NEG NONE NONE NORML NORML NEG 0 116	4 0 NEG NONE NONE NONE NORML NORML NEG 0 1111	
There is no indication of any contamination in the oil. FLUID CONDITION	Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium	ppm ppm scalar scalar scalar scalar scalar ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *ASTM D5185m ASTM D5185m ASTM D5185m	>50 >20 >0.2 NONE NONE NORML NORML >0.2	4 1 NEG NONE NONE NORML NORML NEG 0 116 <1	4 0 NEG NONE NONE NORML NORML NEG 0 111	
There is no indication of any contamination in the oil. FLUID CONDITION	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 ppm ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual *Tisual *Visual *ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>50 >20 >0.2 NONE NONE NORML NORML >0.2	4 1 NEG NONE NONE NORML NORML NEG 0 116 <1	4 0 NEG NONE NONE NORML NORML NEG 0 111 0	
There is no indication of any contamination in the oil. FLUID CONDITION	Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese	ppm ppm scalar scalar scalar scalar scalar ppm ppm ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual *Visual *ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>50 >20 >0.2 NONE NONE NORML NORML >0.2 400 200 12	4 1 NEG NONE NONE NORML NORML NEG 0 116 <1 2 0	4 0 NEG NONE NONE NORML NORML NEG 0 111 0 0 <1	
There is no indication of any contamination in the oil. FLUID CONDITION	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	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>50 >20 >0.2 NONE NONE NORML NORML >0.2 400 200 12	4 1 NEG NONE NONE NORML NORML NEG 0 116 <1 2 0 16	4 0 NEG NONE NONE NORML NORML NEG 0 111 0 0 <1 16	
There is no indication of any contamination in the oil. FLUID CONDITION	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 ppm ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *ASTM D5185m ASTM D5185m	>50 >20 >0.2 NONE NONE NORML NORML >0.2 400 200 12 12 150 1650	4 1 NEG NONE NONE NORML NORML NEG 0 116 <1 2 0 16 149	4 0 NEG NONE NONE NORML NORML NEG 0 111 0 0 <1 16 136	
There is no indication of any contamination in the oil. FLUID CONDITION	Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm scalar scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm ppm ppm pp	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual *Visual *ASTM D5185m ASTM D5185m	>50 >20 >0.2 NONE NONE NORML NORML >0.2 400 200 12 12 150 1650 125	4 1 NEG NONE NONE NORML NORML NEG 0 116 <1 2 0 16 149 1076	4 0 NEG NONE NONE NORML NORML NEG 0 111 0 0 <1 16 136 970	











Certificate L2367

Laboratory Sample No.

: ML0946569 Lab Number : 06235261 Unique Number : 11124095 Test Package : CONST

To discuss this sample report, contact Customer Service at 1-800-237-1369.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received **Tested**

: 15 Jul 2024 Diagnosed

: 12 Jul 2024

: 15 Jul 2024 - Sean Felton

WILLIAM HAZEL PO BOX 600 CHANTILLY, VA US 20153

Contact: SERVICE MANAGER jimmy_elswick@wahazel.com T: (703)378-8300

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

F: