

Machine Id VOLVO A30D 14058 Component Bogie/Center Axle Fluid GEAR OIL LS 80W90 (--- 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

Bearing and/or bushing wear is indicated. Gear wear is indicated.

CONTAMINATION

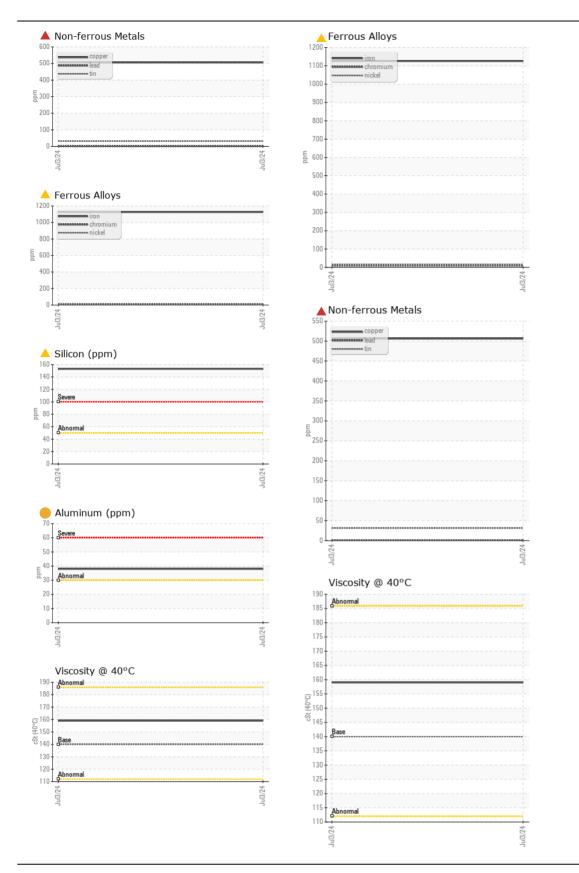
Elemental levels of silicon (Si) and aluminum (AI) indicate aluminasilicate (coarse dirt) ingress.

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FLU	'ONI	ПΤΙ	ON
ILU			

The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0004302		
Sample Date		Client Info		03 Jul 2024		
Machine Age	hrs	Client Info		10297		
Oil Age	hrs	Client Info		10297		
Filter Age	hrs	Client Info		0		
Oil Changed		Client Info		Changed		
Filter Changed		Client Info		N/A		
Sample Status				SEVERE		
Iron	ppm	ASTM D5185m	>900	▲ 1126		
Chromium	ppm	ASTM D5185m	>20	10		
Nickel	ppm	ASTM D5185m	>10	▲ 14 0		
Titanium	ppm	ASTM D5185m		2		
Silver	ppm	ASTM D5185m	0.0	0		
Aluminum	ppm	ASTM D5185m	>30	9 38		
Lead	ppm	ASTM D5185m	>50	<1		
Copper	ppm	ASTM D5185m	>150	▲ 506		
Tin	ppm	ASTM D5185m	>20	▲ 31		
Vanadium	ppm	ASTM D5185m	NONE	<1		
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Yellow Metal Silicon	scalar ppm	*Visual ASTM D5185m	NONE	NONE		
Silicon	ppm	ASTM D5185m	>50	1 53		
Silicon Potassium	ppm	ASTM D5185m ASTM D5185m	>50 >20	▲ 153 22		
Silicon Potassium Water	ppm ppm	ASTM D5185m ASTM D5185m WC Method	>50 >20 >0.2	153 22 NEG		
Silicon Potassium Water Silt	ppm ppm scalar	ASTM D5185m ASTM D5185m WC Method *Visual	>50 >20 >0.2 NONE	 153 22 NEG NONE 		
Silicon Potassium Water Silt Debris	ppm ppm scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual	>50 >20 >0.2 NONE NONE	 153 22 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 NONE	 153 22 NEG NONE 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	>50 >20 >0.2 NONE NONE NONE NORML	 153 22 NEG NONE NONE NONE NORML 		
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	>50 >20 >0.2 NONE NONE NONE NORML NORML	 153 22 NEG 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	>50 >20 >0.2 NONE NONE NORML NORML >0.2	 153 22 NEG NONE NONE NORML NORML NEG 4 		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron	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 NONE NORML NORML	 153 22 NEG NONE NONE NORML NORML NEG 4 181 		
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	>50 >20 >0.2 NONE NONE NORML NORML >0.2	 153 22 NEG NONE NONE NORML NORML NEG 4 181 0 		
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	>50 >20 >0.2 NONE NONE NORML NORML >0.2	 153 22 NEG NONE NONE NORML NORML NEG 4 181 0 1 		
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	>50 >20 >0.2 NONE NONE NORML >0.2 150	 153 22 NEG NONE NONE NORML NORML NEG 4 181 0 1 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 scalar ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	 >50 >20 >0.2 NONE NONE NORML NORML >0.2 150 10 	 153 22 NEG NONE NONE NORML NORML NEG 4 181 0 1 10 41 		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Malybdenum Manganese Magnesium	ppm ppm scalar scalar scalar scalar scalar scalar ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	 >50 >20 >0.2 NONE NORML NORML >0.2 150 10 70 	 153 22 NEG NONE NONE NORML NORML NEG 4 181 0 1 10 41 548 		
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	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	 >50 >20 >0.2 NONE NORME NORML >0.2 150 110 70 2000 	 153 22 NEG NONE NORML NORML NEG 4 181 0 1 10 41 548 1129 		
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 ppm ppm 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 ASTM D5185m	 >50 >20 >0.2 NONE NONE NORML >0.2 150 150 10 70 2000 50 	 153 22 NEG NONE NONE NORML NORML NEG 4 181 0 1 10 41 548 1129 47 		
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	 >50 >20 >0.2 NONE NORME NORML >0.2 150 110 70 2000 	 153 22 NEG NONE NORML NORML NEG 4 181 0 1 10 41 548 1129 		

Submitted By: Riley Shipe



520 - ASCENDUM MACHINERY INC - KNOXVILLE Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. : ASC0004302 Received 5730 RUTLEDGE PIKE : 08 Jul 2024 Lab Number : 06230493 Tested : 10 Jul 2024 KNOXVILLE, TN : 10 Jul 2024 - Don Baldridge US 37924 Unique Number : 11113986 Diagnosed Test Package : CONST Contact: BRANDON GRANT Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. brandon.grant@ascendummachinery.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (865)525-1845 F: (865)525-0251 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)