

#### [592764 HERC] Machine Id VOLVO 310708 Component Rear Right Final Drive Fluid

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

### RECOMMENDATION

We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. 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

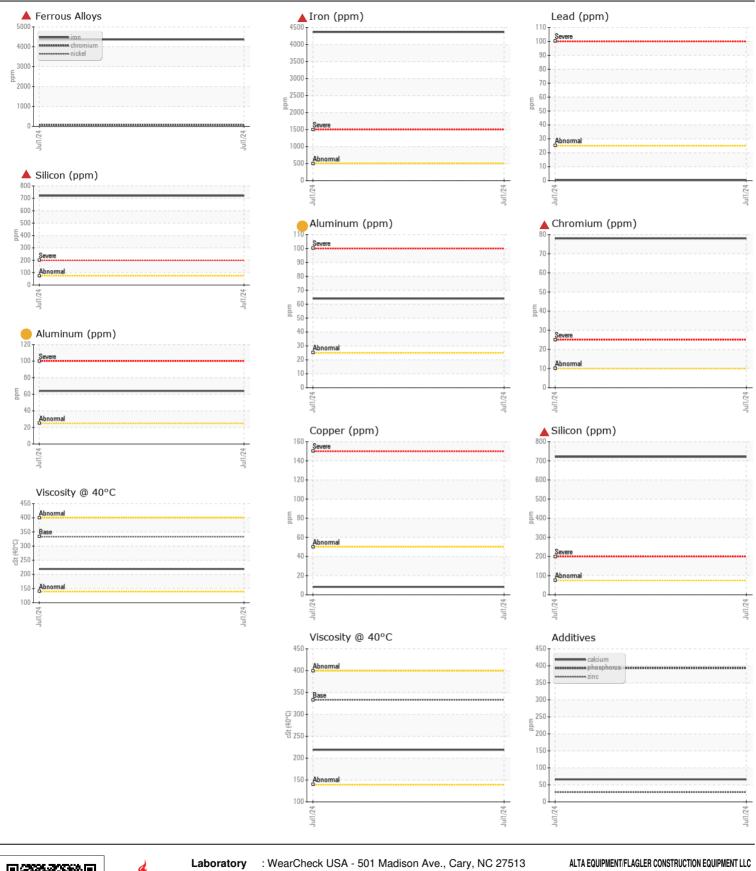
Elemental levels of silicon (Si) and aluminum (AI) indicate aluminasilicate (coarse dirt) ingress.

# FLUID CONDITION

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

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Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP443809		
Sample Date		Client Info		01 Jul 2024		
Machine Age	hrs	Client Info		3516		
Oil Age	hrs	Client Info		0		
Filter Age	hrs	Client Info		0		
Oil Changed		Client Info		Not Changd		
Filter Changed		Client Info		Not Changd		
Sample Status				SEVERE		
Iron	ppm	ASTM D5185m	>500	<b>4366</b>		
Chromium	ppm	ASTM D5185m	>10	<b>4</b> 78		
Nickel	ppm	ASTM D5185m	>10	6		
Titanium	ppm	ASTM D5185m		5		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m	>25	64		
Lead	ppm	ASTM D5185m	>25	<1		
Copper	ppm	ASTM D5185m	>50	8		
Tin	ppm	ASTM D5185m	>10	0		
Vanadium	ppm	ASTM D5185m		<1		
White Metal	scalar	*Visual	NONE	NONE		
			NONE			
Yellow Metal	scalar	*Visual	NONE	NONE		
Yellow Metal Silicon		*Visual ASTM D5185m	>75	NONE 721		
	scalar ppm ppm					
Silicon	ppm	ASTM D5185m	>75	<b>A</b> 721		
Silicon Potassium	ppm	ASTM D5185m ASTM D5185m	>75 >20	▲ 721 5		
Silicon Potassium Water	ppm ppm	ASTM D5185m ASTM D5185m WC Method	>75 >20 >0.2	▲ 721 5 NEG		
Silicon Potassium Water Silt	ppm ppm scalar	ASTM D5185m ASTM D5185m WC Method *Visual	>75 >20 >0.2 NONE	<ul> <li>721</li> <li>5</li> <li>NEG</li> <li>NONE</li> </ul>		 
Silicon Potassium Water Silt Debris Sand/Dirt	ppm ppm scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual	>75 >20 >0.2 NONE NONE	<ul> <li>721</li> <li>5</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> </ul>		 
Silicon Potassium Water Silt Debris	ppm ppm scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual	>75 >20 >0.2 NONE NONE NONE	<ul> <li>721</li> <li>5</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NONE</li> </ul>		   
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	<ul> <li>721</li> <li>5</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> </ul>		
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	<ul> <li>721</li> <li>5</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>NEG</li> </ul>		
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	<ul> <li>721</li> <li>5</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>NEG</li> <li>6</li> </ul>		
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 NONE NORML >0.2	<ul> <li>721</li> <li>5</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>NEG</li> <li>6</li> <li>0</li> </ul>		
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	<ul> <li>721</li> <li>5</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>NEG</li> <li>6</li> <li>0</li> <li>2</li> </ul>		
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	>75 >20 >0.2 NONE NONE NORML NORML >0.2 1111 0.0 0.9	<ul> <li>721</li> <li>5</li> <li>NEG</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>NEG</li> <li>6</li> <li>0</li> <li>2</li> <li>8</li> </ul>		
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	>75 >20 >0.2 NONE NONE NORML >0.2 1111 0.0 0.9 0.9	<ul> <li>721</li> <li>5</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>NEG</li> <li>6</li> <li>0</li> <li>2</li> <li>8</li> <li>37</li> </ul>		
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	<ul> <li>721</li> <li>5</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>NEG</li> <li>6</li> <li>0</li> <li>2</li> <li>8</li> <li>37</li> <li>10</li> </ul>		
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 NONE NORML NORML >0.2 1111 0.0 0.9 0.0 39 93	<ul> <li>721</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>NEG</li> <li>6</li> <li>0</li> <li>2</li> <li>8</li> <li>37</li> <li>10</li> <li>66</li> </ul>		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Malybdenum 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	<ul> <li>&gt;75</li> <li>&gt;20</li> <li>&gt;0.2</li> <li>NONE</li> <li>NORME</li> <li>NORML</li> <li>&gt;0.2</li> <li>111</li> <li>0.0</li> <li>0.9</li> <li>0.0</li> <li>39</li> <li>93</li> <li>920</li> </ul>	<ul> <li>721</li> <li>5</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>NEG</li> <li>6</li> <li>0</li> <li>2</li> <li>8</li> <li>37</li> <li>10</li> <li>66</li> <li>393</li> </ul>		
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	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	>75 >20 >0.2 NONE NONE NORML >0.2 1111 0.0 0.9 0.0 39 93 920 104	<ul> <li>721</li> <li>5</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>NEG</li> <li>6</li> <li>0</li> <li>2</li> <li>8</li> <li>37</li> <li>10</li> <li>66</li> <li>393</li> <li>28</li> </ul>		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Malybdenum 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	<ul> <li>&gt;75</li> <li>&gt;20</li> <li>&gt;0.2</li> <li>NONE</li> <li>NORME</li> <li>NORML</li> <li>&gt;0.2</li> <li>111</li> <li>0.0</li> <li>0.9</li> <li>0.0</li> <li>39</li> <li>93</li> <li>920</li> </ul>	<ul> <li>721</li> <li>5</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>NEG</li> <li>6</li> <li>0</li> <li>2</li> <li>8</li> <li>37</li> <li>10</li> <li>66</li> <li>393</li> </ul>		

Contact/Location: KENNY HANEY - VOLVO0093



回留 Sample No. : VCP443809 Received 8418 PALM RIVER ROAD : 05 Jul 2024 : 06229005 Lab Number TAMPA, FL Tested : 09 Jul 2024 Unique Number : 11112498 : 09 Jul 2024 - Sean Felton US 33619 Diagnosed Test Package : MOB 1 Contact: KENNY HANEY Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. khaney@flaglerce.com \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (813)630-0077 F: (813)630-2233 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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