

# [701908 MOSAIC] TAKEUCHI TB2150 514601123

### **Rear Right 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 recommend an early resample to monitor this condition.

#### **WEAR**

Gear wear is indicated.

### CONTAMINATION

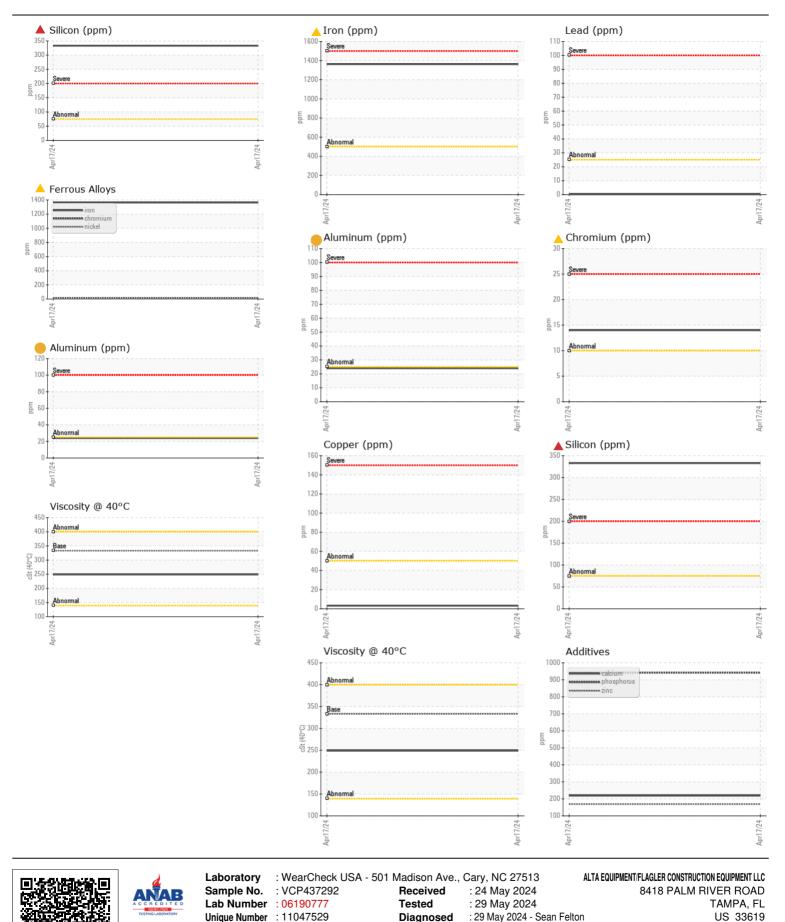
Elemental levels of silicon (Si) and aluminum (AI) indicate aluminasilicate (coarse dirt) ingress.

## 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		VCP437292		
Sample Date		Client Info		17 Apr 2024		
Machine Age	hrs	Client Info		967		
Oil Age	hrs	Client Info		500		
Filter Age	hrs	Client Info		0		
Oil Changed		Client Info		Changed		
Filter Changed		Client Info		Not Changd		
Sample Status				SEVERE		
			500	4000		
Iron	ppm	ASTM D5185m	>500	▲ 1363		
Chromium	ppm	ASTM D5185m	>10	▲ 14 -		
Nickel	ppm	ASTM D5185m	>10	7		
Titanium	ppm	ASTM D5185m		2		
Silver	ppm	ASTM D5185m	05	0		
Aluminum	ppm	ASTM D5185m	>25	<b>2</b> 4		
Lead	ppm	ASTM D5185m	>25	<1		
Copper	ppm	ASTM D5185m	>50	3		
Tin	ppm	ASTM D5185m	>10	<1		
Vanadium	ppm	ASTM D5185m		<1		
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
		*Visual ASTM D5185m	NONE	NONE		
Yellow Metal	ppm					
Yellow Metal Silicon		ASTM D5185m	>75	<b>▲</b> 333		
Yellow Metal Silicon Potassium	ppm	ASTM D5185m ASTM D5185m	>75 >20	▲ 333 17		
Yellow Metal Silicon Potassium Water	ppm ppm	ASTM D5185m ASTM D5185m WC Method	>75 >20 >0.2	▲ 333 17 NEG		
Yellow Metal Silicon Potassium Water Silt	ppm ppm scalar	ASTM D5185m ASTM D5185m WC Method *Visual	>75 >20 >0.2 NONE	<ul> <li>333</li> <li>17</li> <li>NEG</li> <li>NONE</li> </ul>		  
Yellow Metal Silicon Potassium Water Silt Debris	ppm ppm scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual	>75 >20 >0.2 NONE NONE	<ul> <li>333</li> <li>17</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> </ul>		 
Yellow Metal 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	<ul> <li>333</li> <li>17</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NONE</li> </ul>		    
Yellow Metal 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>333</li> <li>17</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> </ul>		
Yellow Metal 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	<ul> <li>333</li> <li>17</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> </ul>		
Yellow Metal 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	<ul> <li>333</li> <li>17</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> </ul>		
Yellow Metal 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>333</li> <li>17</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NORE</li> <li>NORML</li> <li>NORML</li> <li>NEG</li> </ul>		
Yellow Metal Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium	ppm ppm scalar scalar scalar scalar scalar scalar	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>333</li> <li>17</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>NEG</li> <li>3</li> <li>119</li> <li>1</li> </ul>		
Yellow Metal 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 ASTM D5185m	>75 >20 >0.2 NONE NORME NORML >0.2 1111 0.0	<ul> <li>333</li> <li>17</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>NEG</li> <li>3</li> <li>119</li> <li>1</li> <li>10</li> </ul>		
Yellow Metal 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 NONE NORML >0.2 1111 0.0 0.9 0.0	<ul> <li>333</li> <li>17</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>NEG</li> <li>3</li> <li>119</li> <li>1</li> <li>10</li> <li>12</li> </ul>		
Yellow Metal 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	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 NORME NORML >0.2 1111 0.0	<ul> <li>333</li> <li>17</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>NEG</li> <li>3</li> <li>119</li> <li>1</li> <li>10</li> </ul>		
Yellow Metal 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 NORME NORML >0.2 1111 0.0 0.9 0.9	<ul> <li>333</li> <li>17</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>NEG</li> <li>3</li> <li>119</li> <li>1</li> <li>10</li> <li>12</li> </ul>		
Yellow Metal 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 NORML >0.2 1111 0.0 0.9 0.0 39	<ul> <li>333</li> <li>17</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>NEG</li> <li>3</li> <li>119</li> <li>1</li> <li>10</li> <li>12</li> <li>60</li> </ul>		
Yellow Metal 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>333</li> <li>17</li> <li>NEG</li> <li>NONE</li> <li>NORE</li> <li>NORML</li> <li>NORML</li> <li>NEG</li> <li>3</li> <li>119</li> <li>1</li> <li>10</li> <li>12</li> <li>60</li> <li>219</li> </ul>		
Yellow Metal 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	<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>333</li> <li>17</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>NEG</li> <li>3</li> <li>119</li> <li>1</li> <li>10</li> <li>12</li> <li>60</li> <li>219</li> <li>942</li> </ul>		

Contact/Location: KENNY HANEY - VOLVO0093



Diagnosed Test Package : MOB 1 Contact: KENNY HANEY Certificate L2367 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. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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