



Area

**[W02008168]**

Machine Id

**VOLVO EC350 314516**

Component

**Right Final Drive**

Fluid

**VOLVO PREMIUM GEAR OIL 85W-140 GL-5 (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. We recommend an early resample to monitor this condition. ( Customer Sample Comment: W02008168 )

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>ML0001135</b>	---	---
Sample Date		Client Info		<b>12 Apr 2024</b>	---	---
Machine Age	hrs	Client Info		<b>1942</b>	---	---
Oil Age	hrs	Client Info		<b>500</b>	---	---
Filter Age	hrs	Client Info		<b>0</b>	---	---
Oil Changed		Client Info		<b>Changed</b>	---	---
Filter Changed		Client Info		<b>N/A</b>	---	---
Sample Status				<b>SEVERE</b>	---	---

**WEAR**

Gear wear is indicated.

Iron	ppm	ASTM D5185m	>500	<b>▲ 960</b>	---	---
Chromium	ppm	ASTM D5185m	>10	<b>▲ 15</b>	---	---
Nickel	ppm	ASTM D5185m	>10	<b>2</b>	---	---
Titanium	ppm	ASTM D5185m		<b>▲ 15</b>	---	---
Silver	ppm	ASTM D5185m		<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m	>25	<b>● 140</b>	---	---
Lead	ppm	ASTM D5185m	>25	<b>&lt;1</b>	---	---
Copper	ppm	ASTM D5185m	>50	<b>2</b>	---	---
Tin	ppm	ASTM D5185m	>10	<b>0</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---

**CONTAMINATION**

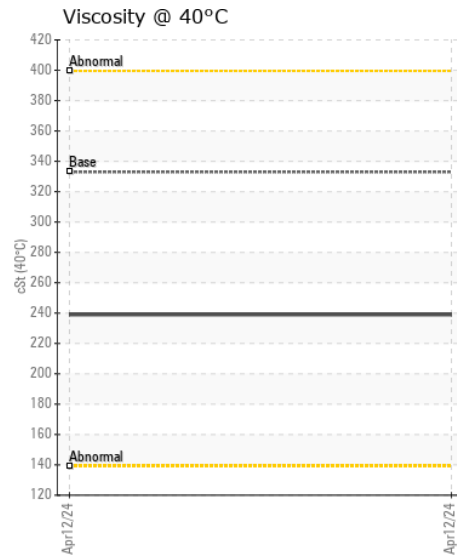
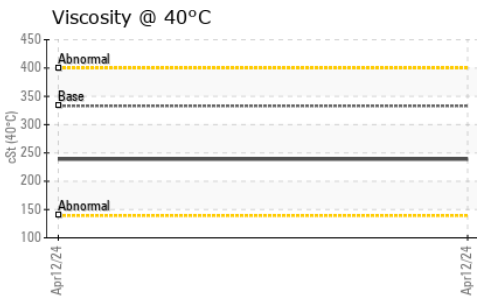
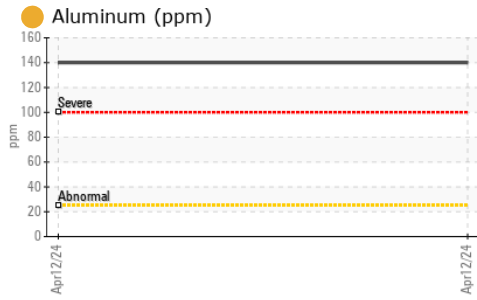
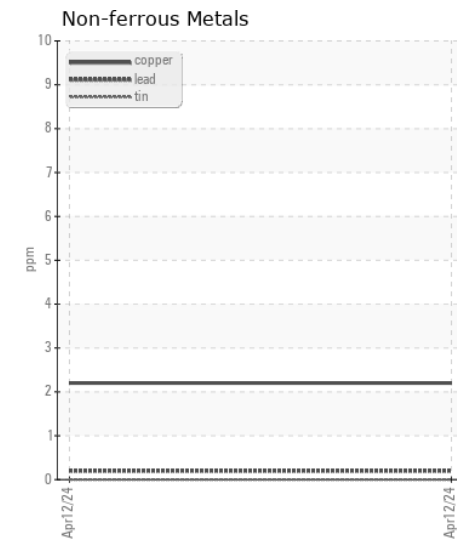
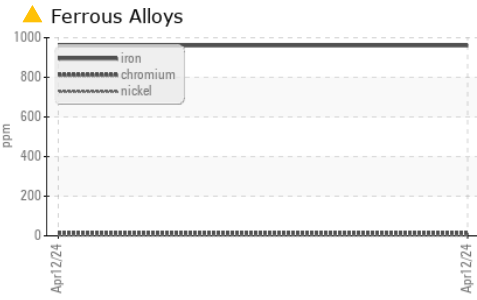
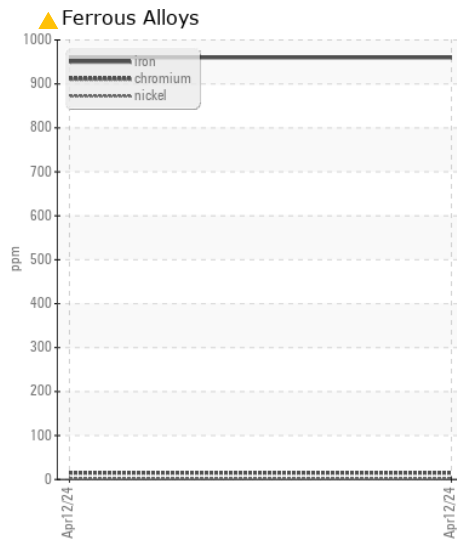
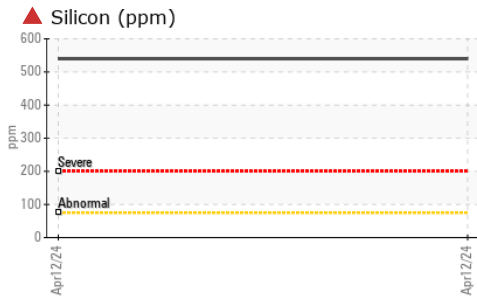
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>75	<b>▲ 540</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>22</b>	---	---
Water		WC Method	>0.2	<b>NEG</b>	---	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	---	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	---	---
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	---	---

**FLUID CONDITION**

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

Sodium	ppm	ASTM D5185m		<b>3</b>	---	---
Boron	ppm	ASTM D5185m	111	<b>122</b>	---	---
Barium	ppm	ASTM D5185m	0.0	<b>3</b>	---	---
Molybdenum	ppm	ASTM D5185m	0.9	<b>3</b>	---	---
Manganese	ppm	ASTM D5185m	0.0	<b>9</b>	---	---
Magnesium	ppm	ASTM D5185m	39	<b>15</b>	---	---
Calcium	ppm	ASTM D5185m	93	<b>146</b>	---	---
Phosphorus	ppm	ASTM D5185m	920	<b>855</b>	---	---
Zinc	ppm	ASTM D5185m	104	<b>59</b>	---	---
Sulfur	ppm	ASTM D5185m	20179	<b>44561</b>	---	---
Visc @ 40°C	cSt	ASTM D445	333	<b>239</b>	---	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ML0001135  
**Lab Number** : 06150768  
**Unique Number** : 10980846  
**Test Package** : CONST

**Received** : 16 Apr 2024  
**Tested** : 17 Apr 2024  
**Diagnosed** : 18 Apr 2024 - Don Baldrige

**MCCLUNG-LOGAN EQUIPMENT CO - MANASSAS**  
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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)