



WEAR	ABNORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL



Area

[W02008527]

Machine Id

VOLVO EC350 314481

Component

Front Front Left 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. Resample at the next service interval to monitor. (Customer Sample Comment: W02008527)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ML0001040	WC0886337	---
Sample Date		Client Info		12 Jul 2024	16 Feb 2024	---
Machine Age	hrs	Client Info		2064	1536	---
Oil Age	hrs	Client Info		528	500	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	N/A	---
Sample Status				ABNORMAL	ABNORMAL	---

WEAR

Gear wear is indicated.

Iron	ppm	ASTM D5185m	>500	▲ 753	▲ 550	---
Chromium	ppm	ASTM D5185m	>10	▲ 11	▲ 11	---
Nickel	ppm	ASTM D5185m	>10	1	<1	---
Titanium	ppm	ASTM D5185m		3	4	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m	>25	● 28	● 37	---
Lead	ppm	ASTM D5185m	>25	0	0	---
Copper	ppm	ASTM D5185m	>50	<1	1	---
Tin	ppm	ASTM D5185m	>10	<1	0	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

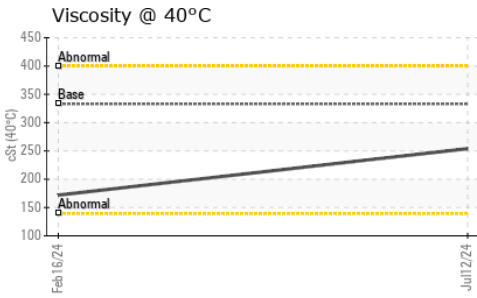
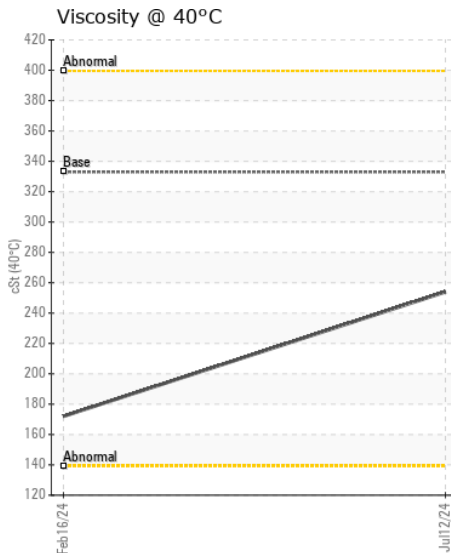
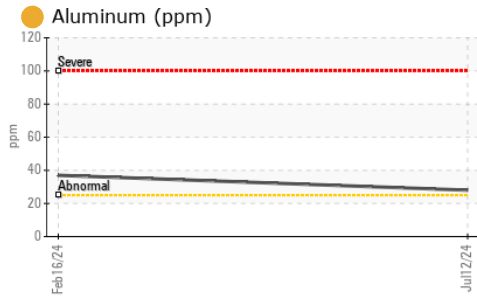
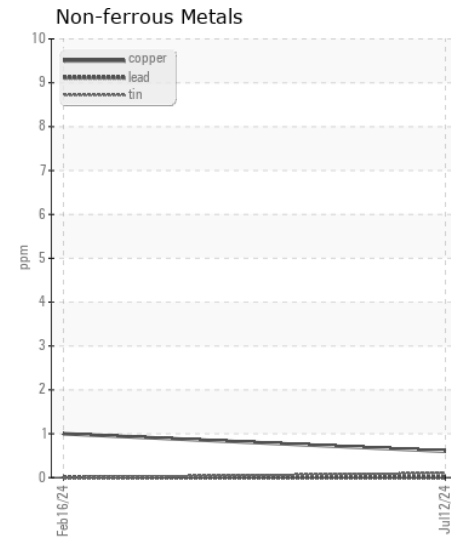
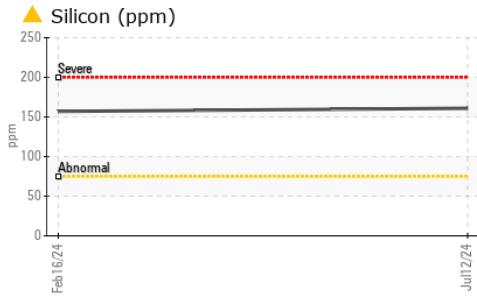
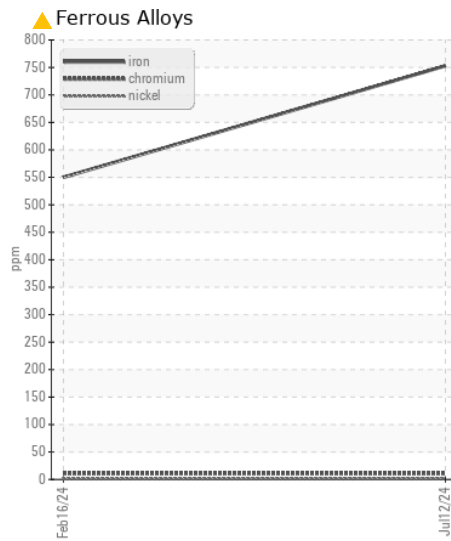
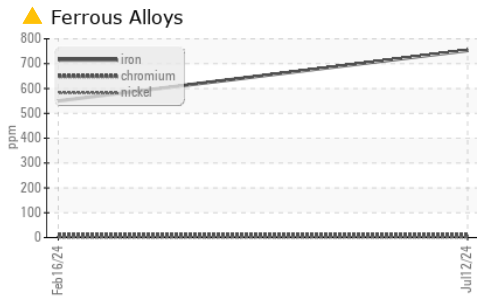
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>75	▲ 161	▲ 157	---
Potassium	ppm	ASTM D5185m	>20	9	11	---
Water		WC Method	>0.2	NEG	NEG	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	---

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		2	<1	---
Boron	ppm	ASTM D5185m	111	95	0	---
Barium	ppm	ASTM D5185m	0.0	0	15	---
Molybdenum	ppm	ASTM D5185m	0.9	<1	1	---
Manganese	ppm	ASTM D5185m	0.0	7	7	---
Magnesium	ppm	ASTM D5185m	39	13	5	---
Calcium	ppm	ASTM D5185m	93	26	16	---
Phosphorus	ppm	ASTM D5185m	920	949	355	---
Zinc	ppm	ASTM D5185m	104	16	0	---
Sulfur	ppm	ASTM D5185m	20179	33800	16707	---
Visc @ 40°C	cSt	ASTM D445	333	254	172	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ML0001040
Lab Number : 06237200
Unique Number : 11126034
Test Package : CONST

Received : 15 Jul 2024
Tested : 17 Jul 2024
Diagnosed : 17 Jul 2024 - Don Baldrige

MCCLUNG-LOGAN EQUIPMENT CO - MANASSAS
 8450 QUARRY ROAD
 MANASSAS, VA
 US 20110
 Contact: DARRELL ANDES
 dandes@mcclung-logan.com
 T:
 F: (703)393-7844

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)