



# ASCENDUM

## OIL ANALYSIS REPORT

WEAR	<b>ABNORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**VOLVO EC140E 315905**  
Component  
**Left Travel**  
Fluid  
**VOLVO PREMIUM GEAR OIL 85W-140 GL-5 (--- GAL)**

### RECOMMENDATION

No corrective action is recommended at this time. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>ASC0008331</b>	ASC0000900	---
Sample Date		Client Info		<b>08 Jul 2024</b>	01 Apr 2024	---
Machine Age	hrs	Client Info		<b>964</b>	554	---
Oil Age	hrs	Client Info		<b>410</b>	554	---
Filter Age	hrs	Client Info		<b>0</b>	0	---
Oil Changed		Client Info		<b>Changed</b>	Changed	---
Filter Changed		Client Info		<b>N/A</b>	N/A	---
Sample Status				<b>ABNORMAL</b>	ABNORMAL	---

### WEAR

The tin level has decreased, but is still abnormal. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>500	<b>146</b>	414	---
Chromium	ppm	ASTM D5185m	>20	<b>2</b>	7	---
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m		<b>0</b>	0	---
Silver	ppm	ASTM D5185m		<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>100	<b>&lt;1</b>	<1	---
Lead	ppm	ASTM D5185m	>10	<b>0</b>	0	---
Copper	ppm	ASTM D5185m	>60	<b>&lt;1</b>	3	---
Tin	ppm	ASTM D5185m	>5	<b>▲ 11</b>	▲ 43	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

### CONTAMINATION

There is no indication of any contamination in the oil.

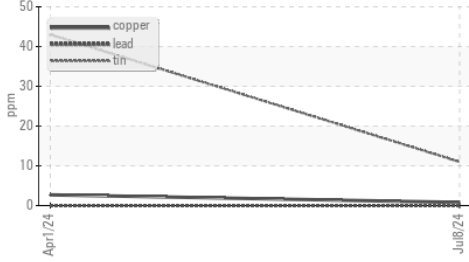
Silicon	ppm	ASTM D5185m	>150	<b>5</b>	10	---
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	---
Water		WC Method	>0.2	<b>NEG</b>	NEG	---
Silt	scalar	*Visual	NONE	<b>LIGHT</b>	MODER	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	---

### FLUID CONDITION

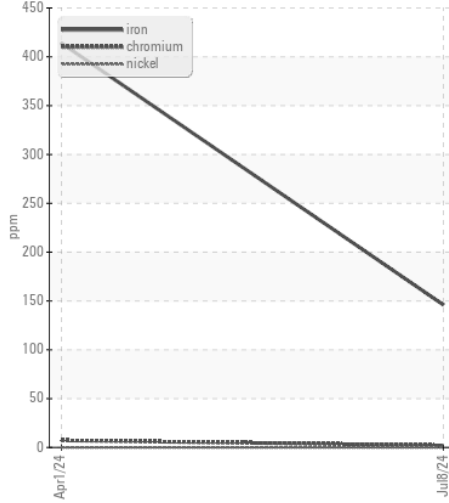
The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		<b>6</b>	4	---
Boron	ppm	ASTM D5185m	111	<b>138</b>	0	---
Barium	ppm	ASTM D5185m	0.0	<b>0</b>	1	---
Molybdenum	ppm	ASTM D5185m	0.9	<b>0</b>	0	---
Manganese	ppm	ASTM D5185m	0.0	<b>2</b>	6	---
Magnesium	ppm	ASTM D5185m	39	<b>0</b>	2	---
Calcium	ppm	ASTM D5185m	93	<b>18</b>	25	---
Phosphorus	ppm	ASTM D5185m	920	<b>912</b>	326	---
Zinc	ppm	ASTM D5185m	104	<b>16</b>	26	---
Sulfur	ppm	ASTM D5185m	20179	<b>28065</b>	18721	---
Visc @ 40°C	cSt	ASTM D445	333	<b>269</b>	141	---

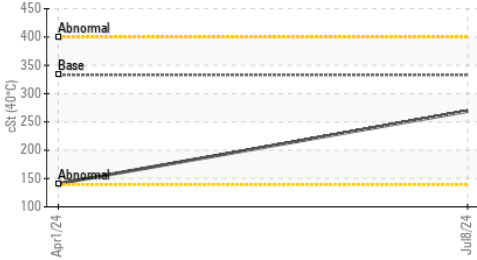
▲ Non-ferrous Metals



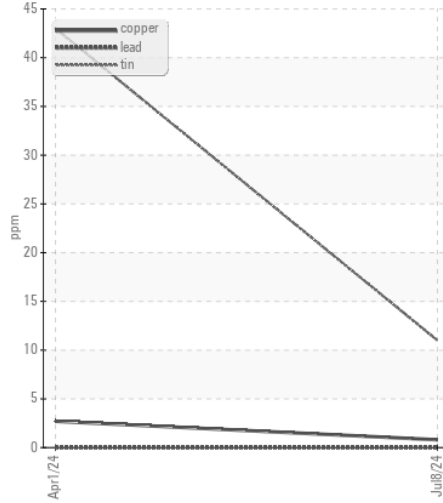
Ferrous Alloys



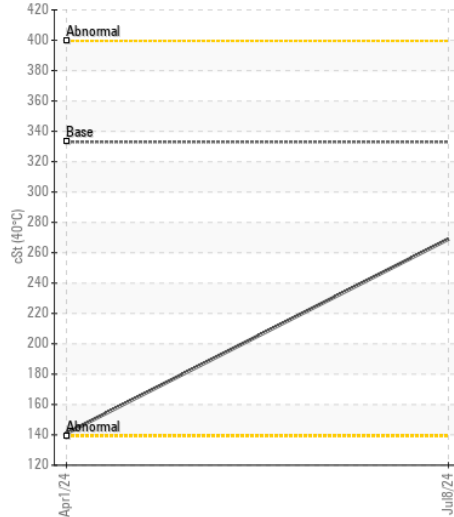
Viscosity @ 40°C



▲ Non-ferrous Metals



Viscosity @ 40°C



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : ASC0008331

Lab Number : 06233569

Unique Number : 11117062

Test Package : CONST

Received : 11 Jul 2024

Tested : 12 Jul 2024

Diagnosed : 13 Jul 2024 - Don Baldrige

**CAROLINA EXCAVATING**

1036 BRANCHVIEW DR, SUITE 106

CONCORD, NC

US 28025

Contact: KEVIN LADGERWOOD

kevin@carlinaexcavation.com

T:

F:

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)