



**McCLUNG-LOGAN**  
EQUIPMENT COMPANY, INC.

OIL ANALYSIS REPORT

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



Machine Id  
**VOLVO ECR145 311293**  
Component  
**Right Final Drive**  
Fluid  
**GEAR OIL SAE 85W140 (--- 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.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>ML0000451</b>	---	---
Sample Date		Client Info		<b>08 Apr 2024</b>	---	---
Machine Age	hrs	Client Info		<b>2913</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>ABNORMAL</b>	---	---

**WEAR**

Gear wear is indicated. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>500	<b>▲ 1204</b>	---	---
Chromium	ppm	ASTM D5185m	>10	<b>▲ 15</b>	---	---
Nickel	ppm	ASTM D5185m	>10	<b>4</b>	---	---
Titanium	ppm	ASTM D5185m		<b>2</b>	---	---
Silver	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Aluminum	ppm	ASTM D5185m	>25	<b>● 13</b>	---	---
Lead	ppm	ASTM D5185m	>25	<b>0</b>	---	---
Copper	ppm	ASTM D5185m	>50	<b>5</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**

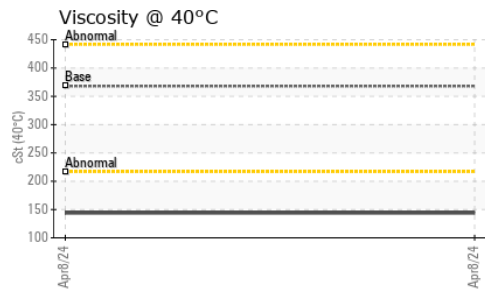
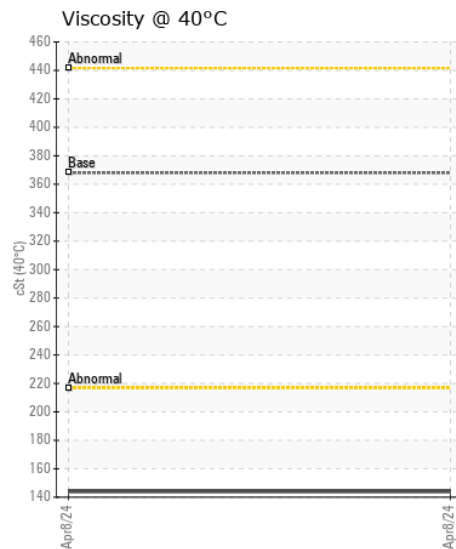
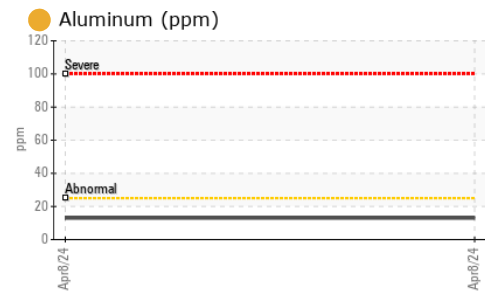
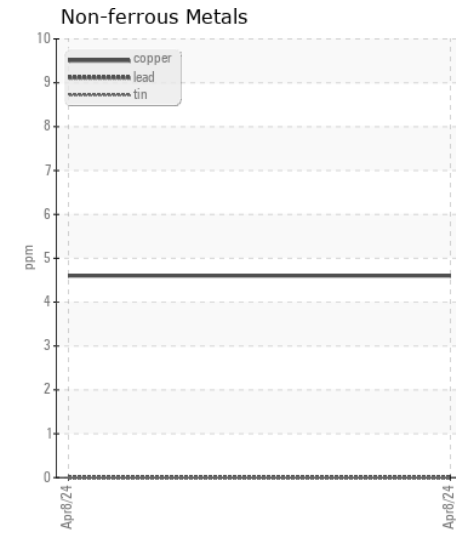
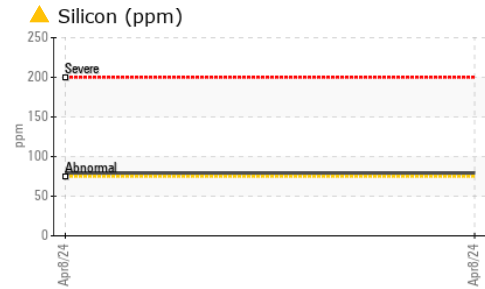
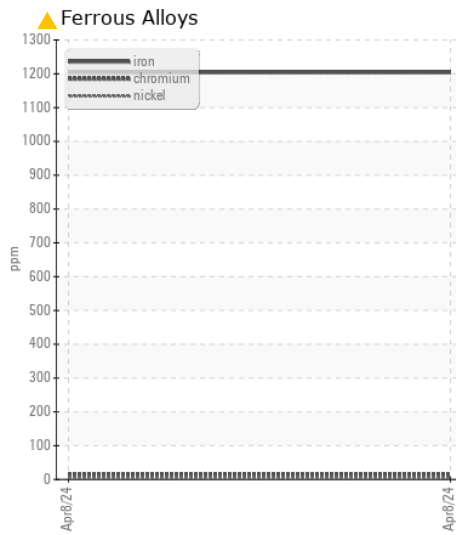
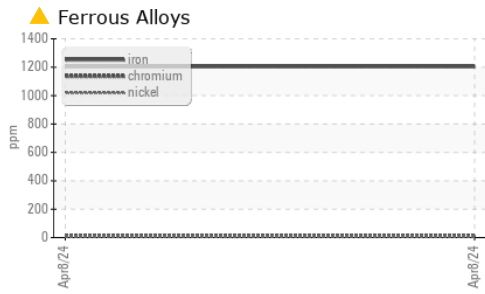
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>75	<b>▲ 79</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>4</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 condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		<b>10</b>	---	---
Boron	ppm	ASTM D5185m	400	<b>2</b>	---	---
Barium	ppm	ASTM D5185m	200	<b>4</b>	---	---
Molybdenum	ppm	ASTM D5185m	12	<b>&lt;1</b>	---	---
Manganese	ppm	ASTM D5185m		<b>13</b>	---	---
Magnesium	ppm	ASTM D5185m	12	<b>5</b>	---	---
Calcium	ppm	ASTM D5185m	150	<b>26</b>	---	---
Phosphorus	ppm	ASTM D5185m	1650	<b>183</b>	---	---
Zinc	ppm	ASTM D5185m	125	<b>42</b>	---	---
Sulfur	ppm	ASTM D5185m	22500	<b>28993</b>	---	---
Visc @ 40°C	cSt	ASTM D445	368	<b>144</b>	---	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ML0000451  
**Lab Number** : 06150761  
**Unique Number** : 10980839  
**Test Package** : CONST

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

**MCCLUNG-LOGAN EQUIPMENT CO - WINCHESTER**  
 160 KENTMERE COURT  
 WINCHESTER, VA  
 US 22603

Contact: JENNIFER MATIAS  
 jmatias@mcclung-logan.com

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)

T: (540)722-3700  
 F: (540)722-4441