



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area
[LITTLE UTILITIES]
 Machine Id
VOLVO EC140 314312

Component
Left Final Drive
 Fluid
GEAR OIL SAE 80W90 (--- GAL)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ML0002959	---	---
Sample Date		Client Info		20 Jun 2024	---	---
Machine Age	hrs	Client Info		3121	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				ABNORMAL	---	---

WEAR

Gear wear is indicated.

Iron	ppm	ASTM D5185m	>500	▲ 1236	---	---
Chromium	ppm	ASTM D5185m	>10	▲ 23	---	---
Nickel	ppm	ASTM D5185m	>10	4	---	---
Titanium	ppm	ASTM D5185m		6	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m	>25	▲ 44	---	---
Lead	ppm	ASTM D5185m	>25	0	---	---
Copper	ppm	ASTM D5185m	>50	2	---	---
Tin	ppm	ASTM D5185m	>10	▲ 37	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

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

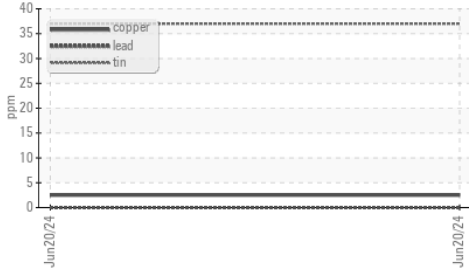
Silicon	ppm	ASTM D5185m	>75	▲ 279	---	---
Potassium	ppm	ASTM D5185m	>20	8	---	---
Water		WC Method	>0.2	NEG	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---	---

FLUID CONDITION

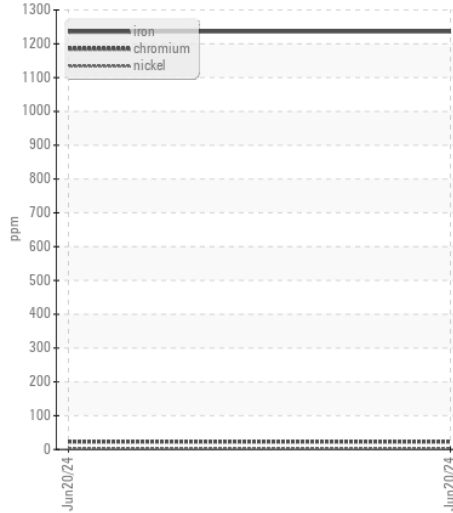
The condition of the oil is acceptable for the time in service. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m	>170	11	---	---
Boron	ppm	ASTM D5185m	400	6	---	---
Barium	ppm	ASTM D5185m	200	3	---	---
Molybdenum	ppm	ASTM D5185m	12	1	---	---
Manganese	ppm	ASTM D5185m		20	---	---
Magnesium	ppm	ASTM D5185m	12	2	---	---
Calcium	ppm	ASTM D5185m	150	43	---	---
Phosphorus	ppm	ASTM D5185m	1650	582	---	---
Zinc	ppm	ASTM D5185m	125	63	---	---
Sulfur	ppm	ASTM D5185m	22500	22045	---	---

▲ Non-ferrous Metals



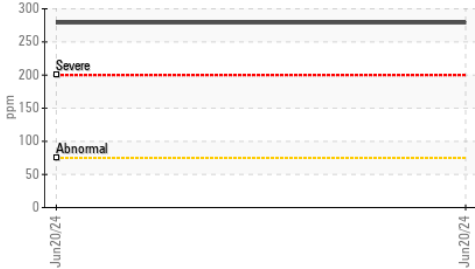
▲ Ferrous Alloys



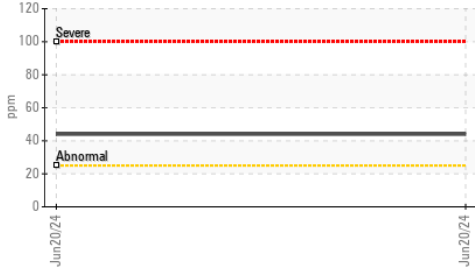
▲ Ferrous Alloys



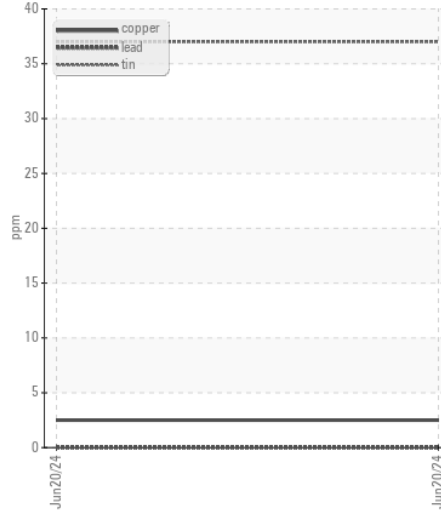
▲ Silicon (ppm)



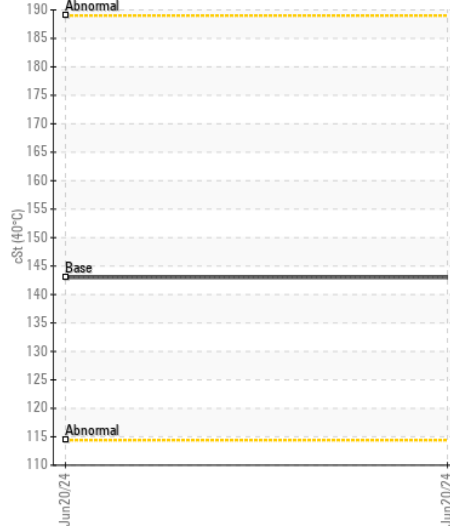
▲ Aluminum (ppm)



▲ Non-ferrous Metals



Viscosity @ 40°C



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ML0002959
Lab Number : 06220455
Unique Number : 11098652
Test Package : CONST

Received : 25 Jun 2024
Tested : 26 Jun 2024
Diagnosed : 27 Jun 2024 - Angela Borella

MCCLUNG-LOGAN EQUIPMENT CO - CHESAPEAKE
 4112 HOLLAND BLVD
 CHESAPEAKE, VA
 US 23323

Contact: TOMMY GRIFFIN
 tgriffin@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)

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