



VOLVO

OIL ANALYSIS REPORT

WEAR	SEVERE
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL



Area
[SVC53073 MORRUNE EXC]
Machine Id
VOLVO EC160BLC 11381
Component
Front Left Final Drive
Fluid
GEAR OIL SAE 80W90 (--- GAL)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

WEAR

Gear wear is indicated.

CONTAMINATION

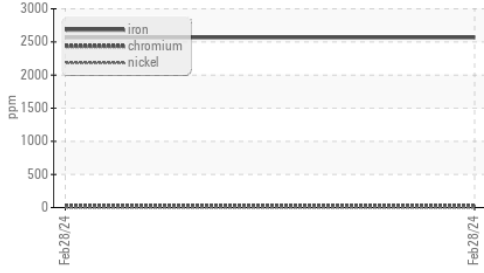
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

FLUID CONDITION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP407058	---	---
Sample Date		Client Info		28 Feb 2024	---	---
Machine Age	hrs	Client Info		6886	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Not Changd	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				SEVERE	---	---
Iron	ppm	ASTM D5185m	>500	▲ 2567	---	---
Chromium	ppm	ASTM D5185m	>10	▲ 21	---	---
Nickel	ppm	ASTM D5185m	>10	2	---	---
Titanium	ppm	ASTM D5185m		10	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m	>25	● 177	---	---
Lead	ppm	ASTM D5185m	>25	0	---	---
Copper	ppm	ASTM D5185m	>50	2	---	---
Tin	ppm	ASTM D5185m	>10	<1	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Silicon	ppm	ASTM D5185m	>75	▲ 916	---	---
Potassium	ppm	ASTM D5185m	>20	71	---	---
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	---	---
Sodium	ppm	ASTM D5185m	>170	50	---	---
Boron	ppm	ASTM D5185m	400	156	---	---
Barium	ppm	ASTM D5185m	200	2	---	---
Molybdenum	ppm	ASTM D5185m	12	0	---	---
Manganese	ppm	ASTM D5185m		15	---	---
Magnesium	ppm	ASTM D5185m	12	20	---	---
Calcium	ppm	ASTM D5185m	150	41	---	---
Phosphorus	ppm	ASTM D5185m	1650	1959	---	---
Zinc	ppm	ASTM D5185m	125	8	---	---
Sulfur	ppm	ASTM D5185m	22500	22718	---	---
Visc @ 40°C	cSt	ASTM D445	143	148	---	---

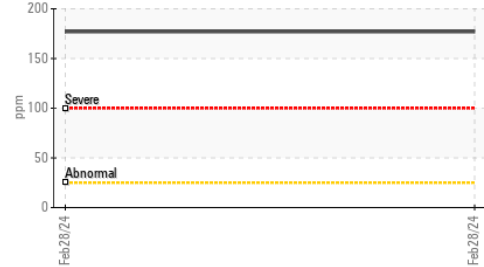
▲ Ferrous Alloys



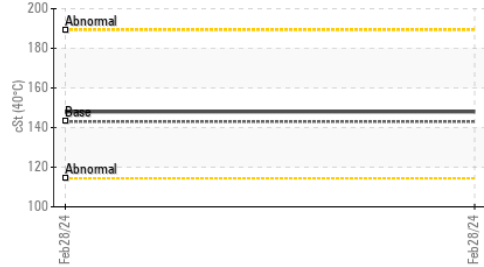
▲ Silicon (ppm)



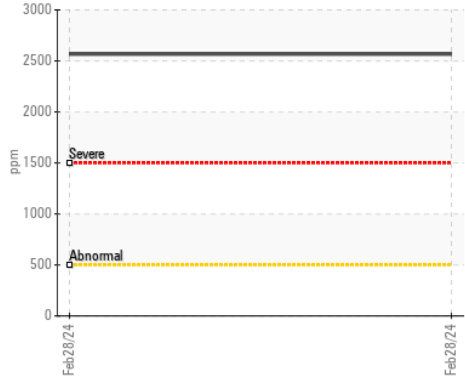
● Aluminum (ppm)



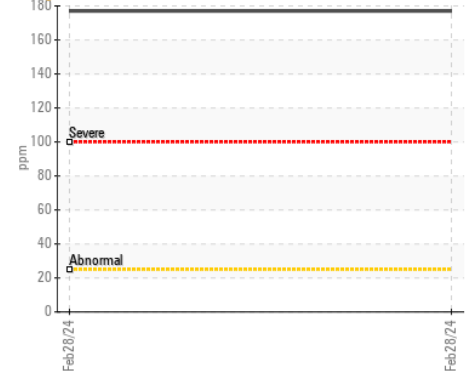
Viscosity @ 40°C



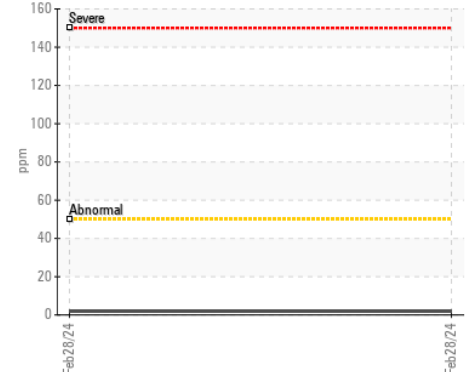
▲ Iron (ppm)



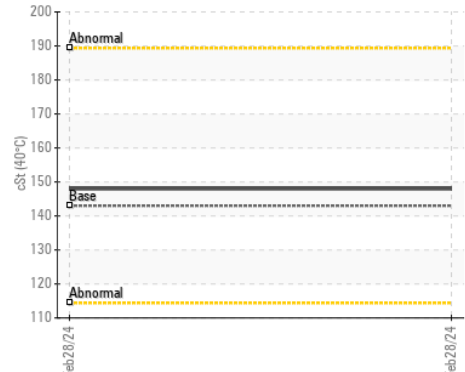
● Aluminum (ppm)



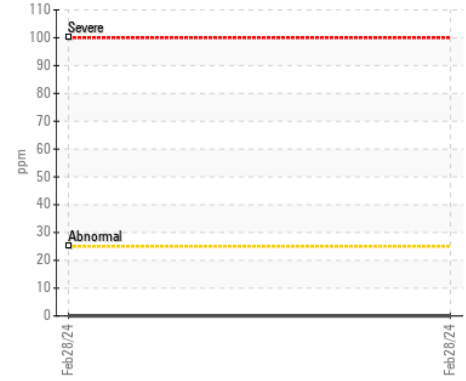
Copper (ppm)



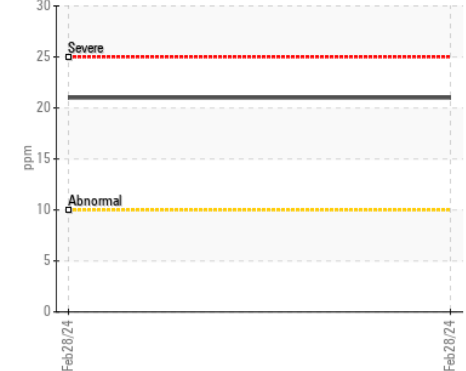
Viscosity @ 40°C



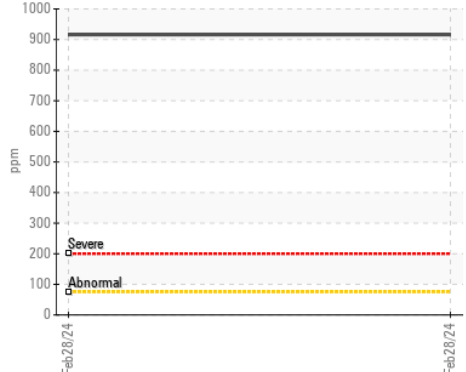
Lead (ppm)



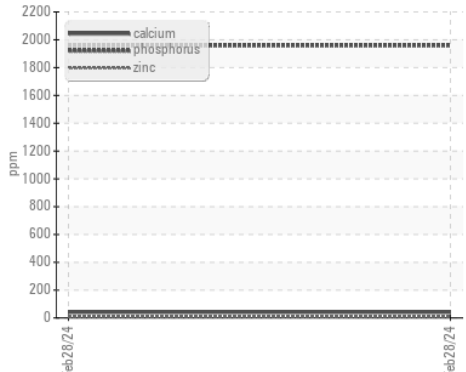
▲ Chromium (ppm)



▲ Silicon (ppm)



Additives



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : VCP407058
 Lab Number : 06106448
 Unique Number : 10909945
 Test Package : MOB 1

Received : 01 Mar 2024
 Tested : 04 Mar 2024
 Diagnosed : 05 Mar 2024 - Jonathan Hester

TYLER EQUIPMENT CORPORATION
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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)