



VOLVO

OIL ANALYSIS REPORT

WEAR	SEVERE
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL



Area
[S50601944 GREEN WAST]
Machine Id
VOLVO L45H 4222054
Component
Front Axle
Fluid
VOLVO WB 102 (--- 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.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP446694	---	---
Sample Date		Client Info		14 Mar 2024	---	---
Machine Age	hrs	Client Info		5440	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Not Changed	---	---
Filter Changed		Client Info		Not Changed	---	---
Sample Status				SEVERE	---	---

WEAR

Gear wear is indicated.

Iron	ppm	ASTM D5185m	>500	▲ 1328	---	---
Chromium	ppm	ASTM D5185m	>20	5	---	---
Nickel	ppm	ASTM D5185m	>10	6	---	---
Titanium	ppm	ASTM D5185m		3	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m	>30	● 46	---	---
Lead	ppm	ASTM D5185m	>50	<1	---	---
Copper	ppm	ASTM D5185m	>120	38	---	---
Tin	ppm	ASTM D5185m	>20	<1	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

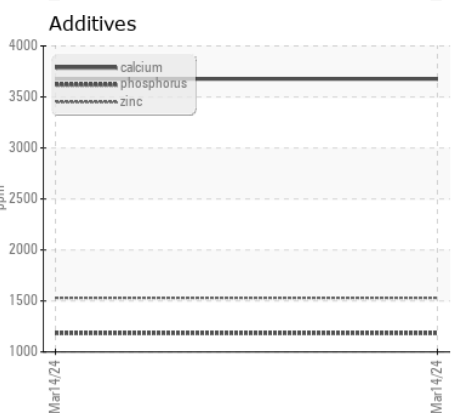
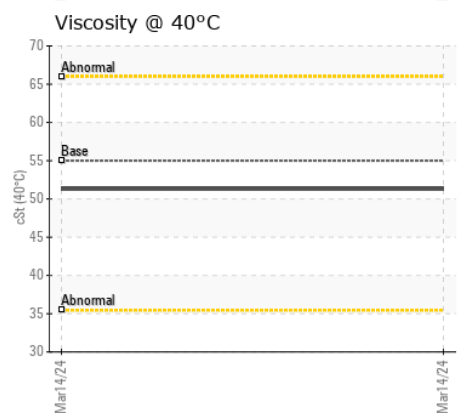
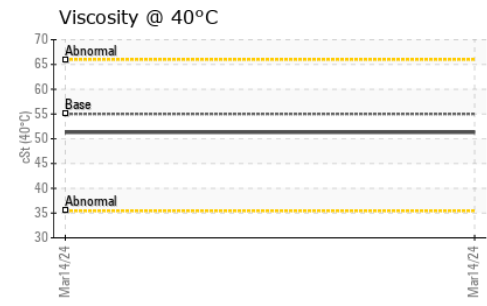
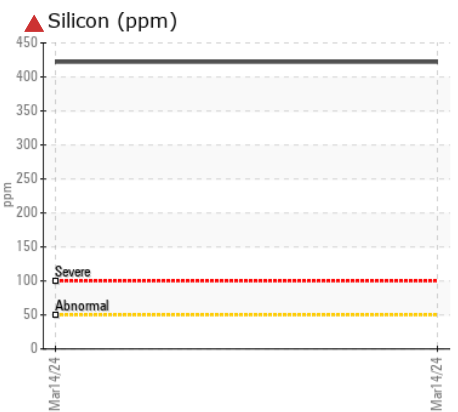
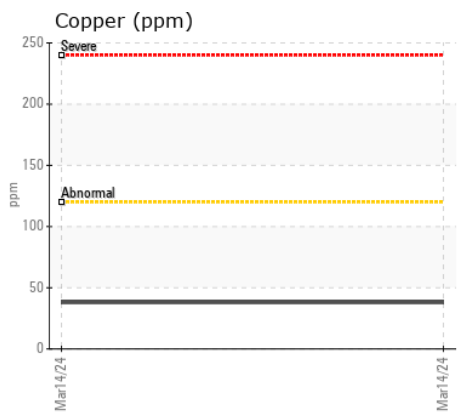
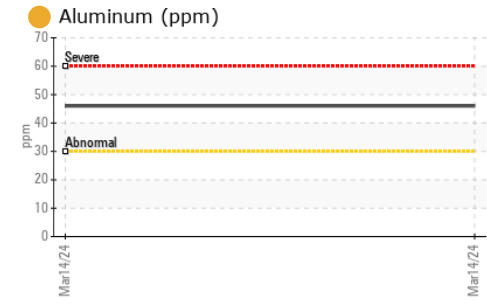
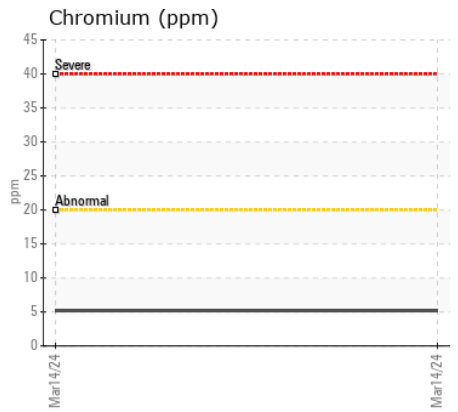
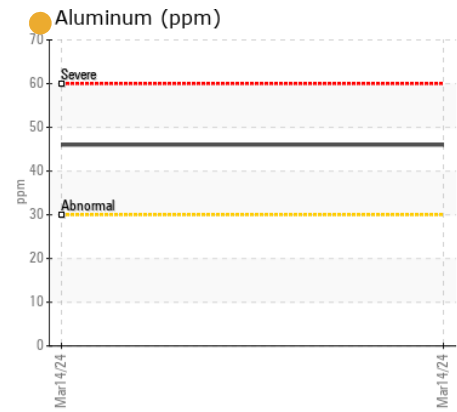
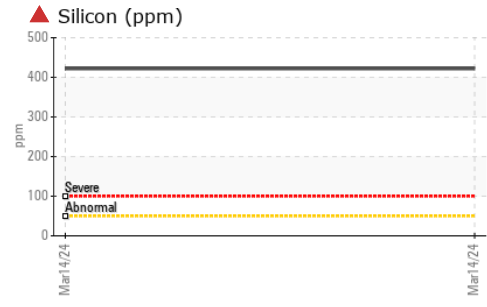
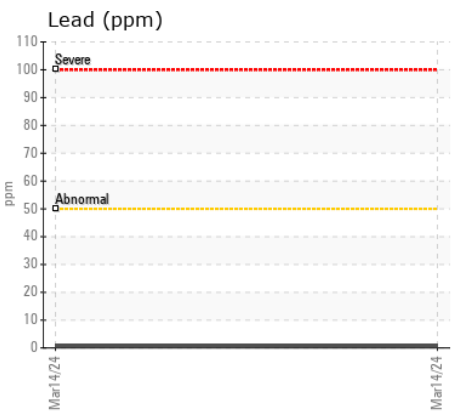
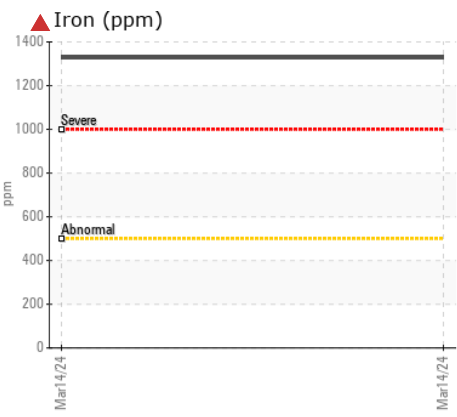
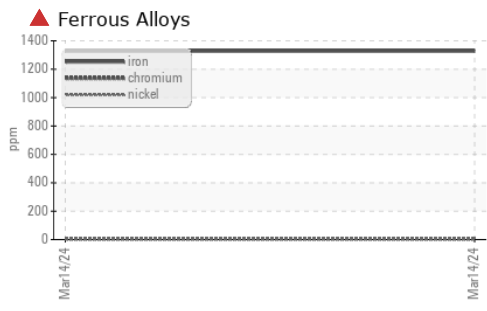
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>50	▲ 422	---	---
Potassium	ppm	ASTM D5185m	>20	9	---	---
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 oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m		11	---	---
Boron	ppm	ASTM D5185m		26	---	---
Barium	ppm	ASTM D5185m		0	---	---
Molybdenum	ppm	ASTM D5185m		3	---	---
Manganese	ppm	ASTM D5185m		13	---	---
Magnesium	ppm	ASTM D5185m		41	---	---
Calcium	ppm	ASTM D5185m		3676	---	---
Phosphorus	ppm	ASTM D5185m		1184	---	---
Zinc	ppm	ASTM D5185m		1530	---	---
Sulfur	ppm	ASTM D5185m		4870	---	---
Visc @ 40°C	cSt	ASTM D445	55	51.3	---	---



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP446694 **Received** : 20 Mar 2024
Lab Number : 06124088 **Tested** : 21 Mar 2024
Unique Number : 10938239 **Diagnosed** : 22 Mar 2024 - Don Baldrige
Test Package : MOB 1

VCES- VOLVO CONSTRUCTION EQUIPMENT
 1944 MARINA BLVD
 SAN LEANDRO, CA
 US 94577
 Contact: JOHN BUDESILICH
 john.budesilich@vcesvolvo.com
 T:
 F: (925)294-9240

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)