



VOLVO

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL



Area
[A12259]
Machine Id
VOLVO L110H 632555
Component
Hydraulic System
Fluid
MOBIL HYDRAULIC OIL AW 46 (--- GAL)

RECOMMENDATION

The filter change at the time of sampling has been noted. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP407250	VCP441835	---
Sample Date		Client Info		06 Mar 2024	03 Oct 2023	---
Machine Age	hrs	Client Info		3345	1760	---
Oil Age	hrs	Client Info		0	1760	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Not Changed	Not Changed	---
Filter Changed		Client Info		Changed	Not Changed	---
Sample Status				ABNORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	6	5	---
Chromium	ppm	ASTM D5185m	>20	2	<1	---
Nickel	ppm	ASTM D5185m	>10	0	0	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m	>20	0	0	---
Lead	ppm	ASTM D5185m	>20	<1	0	---
Copper	ppm	ASTM D5185m	>150	2	2	---
Tin	ppm	ASTM D5185m	>20	<1	0	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

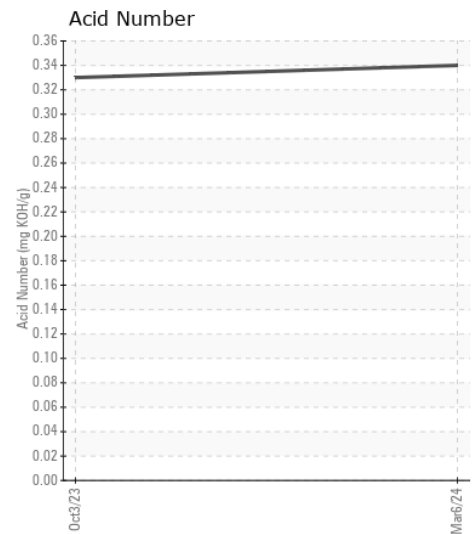
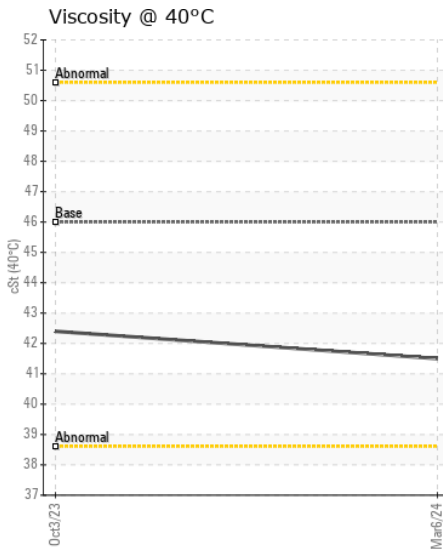
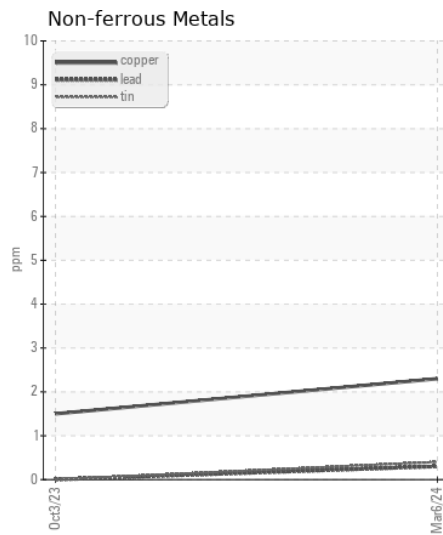
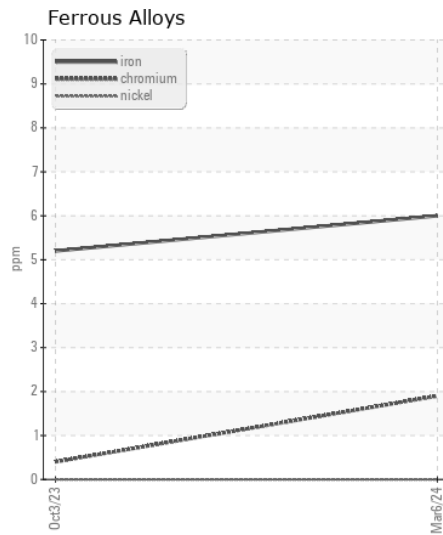
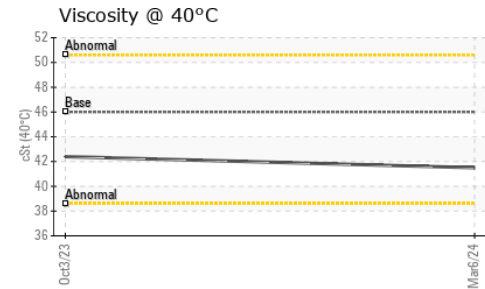
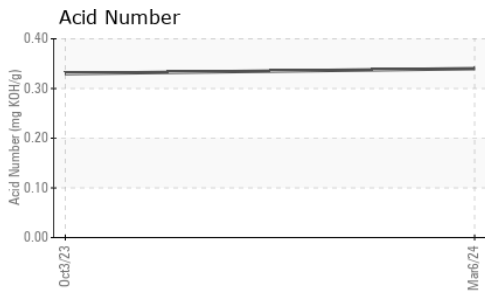
Moderate concentration of visible dirt/debris present in the oil.

Silicon	ppm	ASTM D5185m	>20	1	1	---
Potassium	ppm	ASTM D5185m	>20	<1	<1	---
Water		WC Method	>0.1	NEG	NEG	---
Particles >4µm		ASTM D7647		---	2768	---
Particles >6µm		ASTM D7647	>2500	---	350	---
Particles >14µm		ASTM D7647	>80	---	13	---
Particles >21µm		ASTM D7647	>20	---	2	---
Particles >38µm		ASTM D7647	>4	---	0	---
Particles >71µm		ASTM D7647	>3	---	0	---
Oil Cleanliness		ISO 4406 (c)	>-/18/13	---	19/16/11	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	MODER	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	---

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oils additive package is suitable for further service.

Sodium	ppm	ASTM D5185m		2	<1	---
Boron	ppm	ASTM D5185m		0	0	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		1	1	---
Manganese	ppm	ASTM D5185m		<1	0	---
Magnesium	ppm	ASTM D5185m		5	4	---
Calcium	ppm	ASTM D5185m		62	63	---
Phosphorus	ppm	ASTM D5185m		332	345	---
Zinc	ppm	ASTM D5185m		423	442	---
Sulfur	ppm	ASTM D5185m		2265	2020	---
Acid Number (AN)	mg KOH/g	ASTM D8045		0.34	0.33	---
Visc @ 40°C	cSt	ASTM D445	46	41.5	42.4	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP407250
Lab Number : 06123570
Unique Number : 10937721
Test Package : MOB 2

Received : 20 Mar 2024
Tested : 25 Mar 2024
Diagnosed : 25 Mar 2024 - Jonathan Hester

HMR ASSOCIATES
 PO BOX 485
 TOUGHKENAMON, PA
 US 19374

Contact: SERVICE MANAGER

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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