



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
VOLVO A45G 342398
Component
Hydraulic System
Fluid
VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ML0002623	ML0001506	---
Sample Date		Client Info		28 Jun 2024	15 Apr 2024	---
Machine Age	hrs	Client Info		7961	7441	---
Oil Age	hrs	Client Info		520	3400	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		N/A	Changed	---
Filter Changed		Client Info		N/A	Changed	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

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

CONTAMINATION

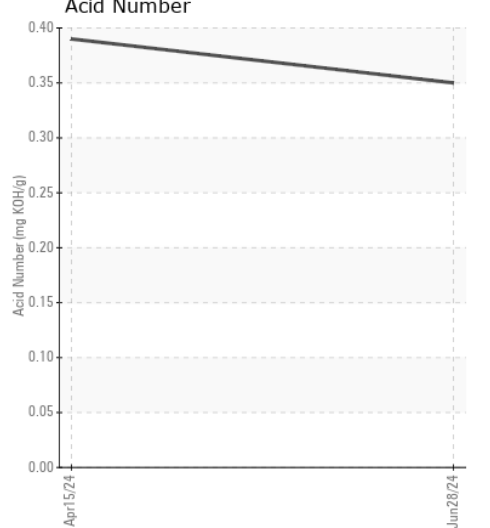
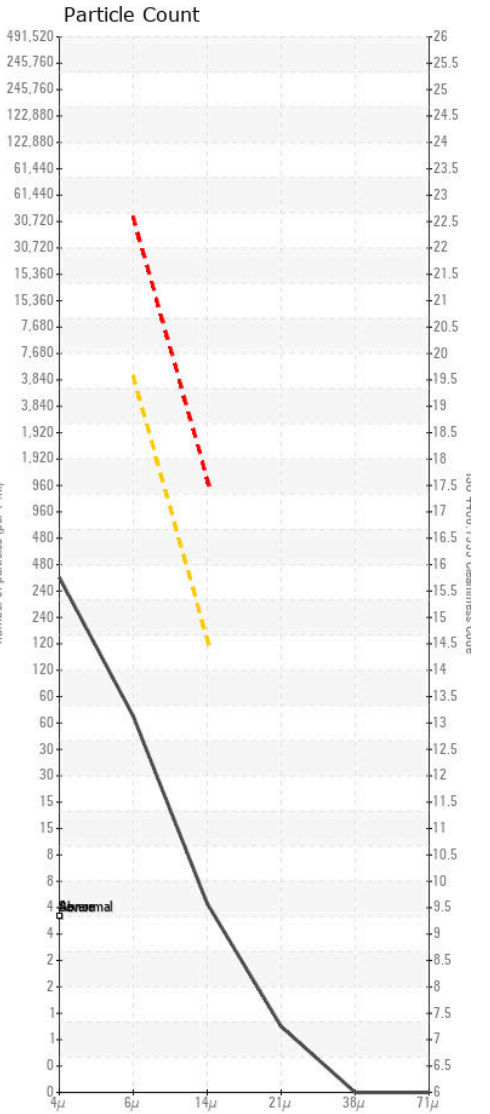
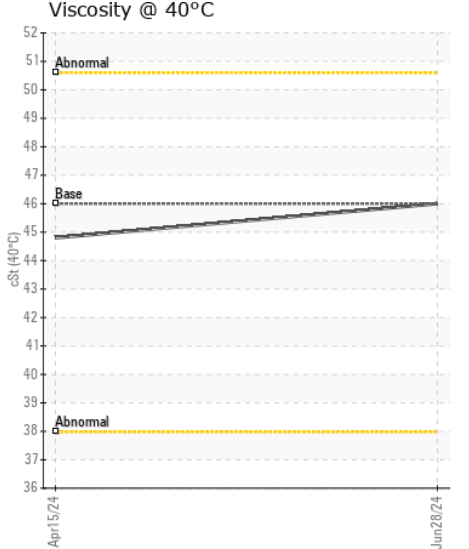
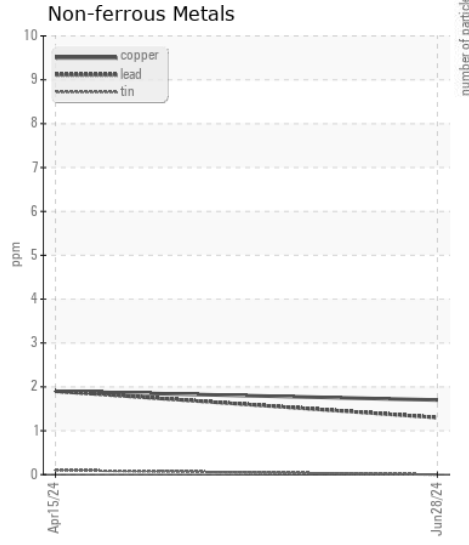
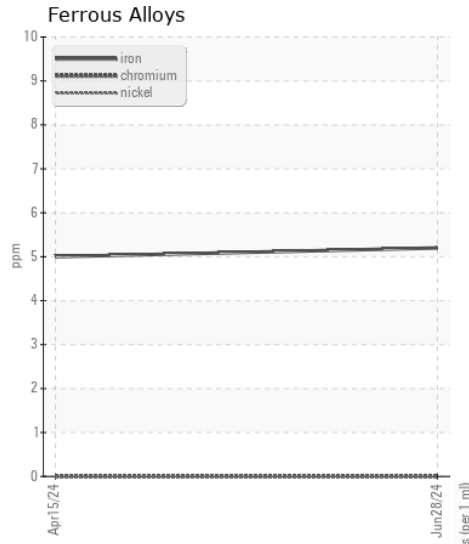
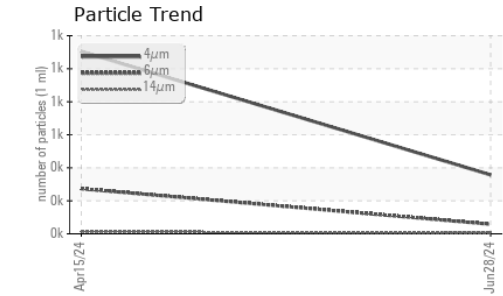
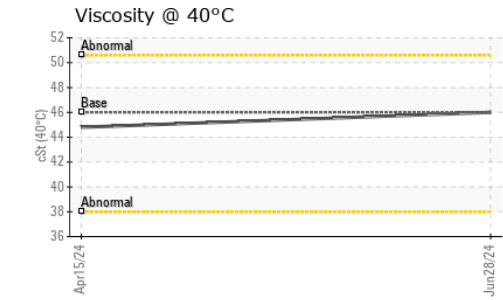
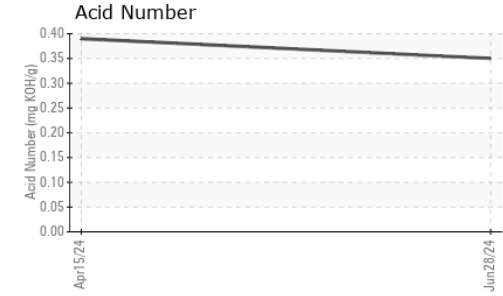
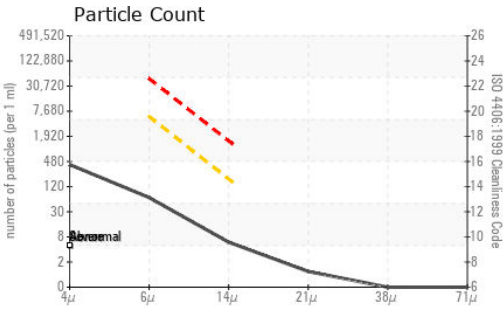
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	2	4	---
Potassium	ppm	ASTM D5185m	>20	3	2	---
Water		WC Method	>0.1	NEG	NEG	---
Particles >4µm		ASTM D7647		357	1105	---
Particles >6µm		ASTM D7647	>5000	58	273	---
Particles >14µm		ASTM D7647	>160	5	13	---
Particles >21µm		ASTM D7647	>40	1	2	---
Particles >38µm		ASTM D7647	>10	0	0	---
Particles >71µm		ASTM D7647	>3	0	0	---
Oil Cleanliness		ISO 4406 (c)	>-/19/14	16/13/10	17/15/11	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	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 oil is suitable for further service.

Sodium	ppm	ASTM D5185m		2	4	---
Boron	ppm	ASTM D5185m	14	4	4	---
Barium	ppm	ASTM D5185m	0.0	0	0	---
Molybdenum	ppm	ASTM D5185m	0.0	2	1	---
Manganese	ppm	ASTM D5185m	0.0	0	<1	---
Magnesium	ppm	ASTM D5185m	2.6	15	19	---
Calcium	ppm	ASTM D5185m	49	172	199	---
Phosphorus	ppm	ASTM D5185m	354	378	391	---
Zinc	ppm	ASTM D5185m	419	483	484	---
Sulfur	ppm	ASTM D5185m	3719	1550	1653	---
Acid Number (AN)	mg KOH/g	ASTM D8045		0.35	0.39	---
Visc @ 40°C	cSt	ASTM D445	46	46.0	44.8	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ML0002623
Lab Number : 06229093
Unique Number : 11112586
Test Package : CONST

Received : 05 Jul 2024
Tested : 09 Jul 2024
Diagnosed : 09 Jul 2024 - Jonathan Hester

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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)