



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
VOLVO A45G 342386
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		ML0002529	ML0000867	VCP399833
Sample Date		Client Info		24 Jun 2024	11 Mar 2024	21 Feb 2023
Machine Age	hrs	Client Info		8353	7813	6665
Oil Age	hrs	Client Info		4667	4557	0
Filter Age	hrs	Client Info		0	4557	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	Not Changd
Sample Status				NORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	6	7	12
Chromium	ppm	ASTM D5185m	>20	0	<1	<1
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	1	2	4
Lead	ppm	ASTM D5185m	>20	0	2	2
Copper	ppm	ASTM D5185m	>150	2	2	6
Tin	ppm	ASTM D5185m	>20	0	<1	<1
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

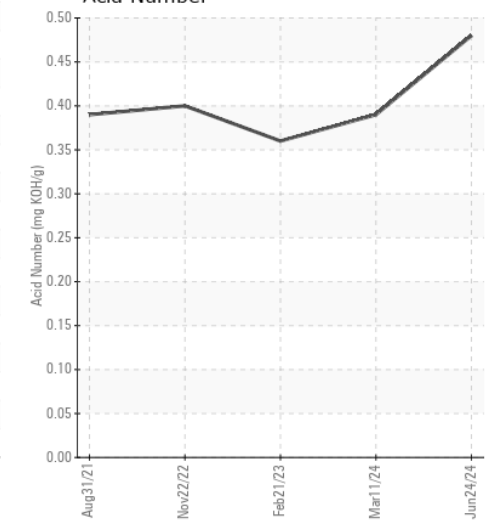
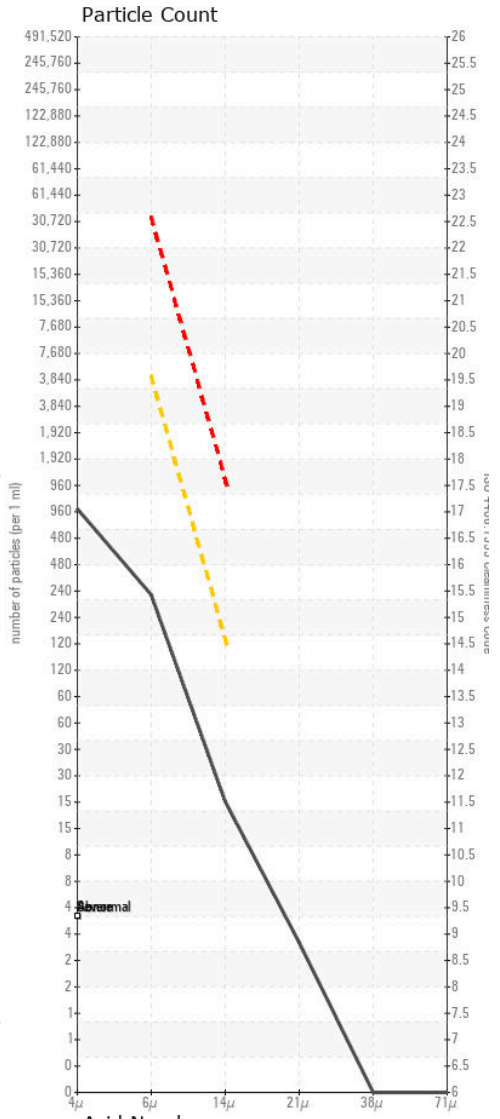
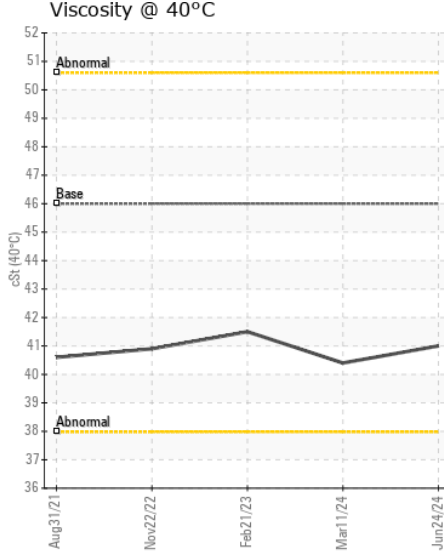
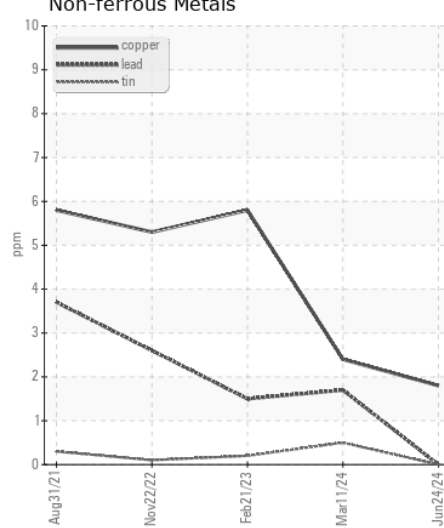
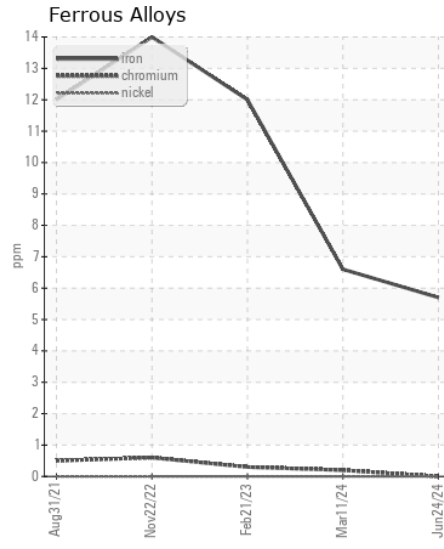
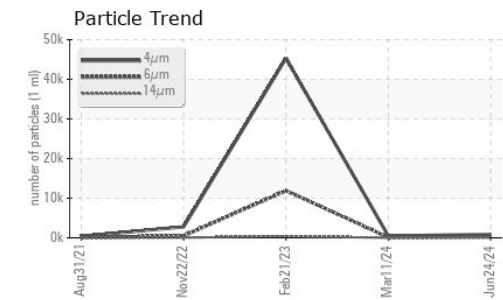
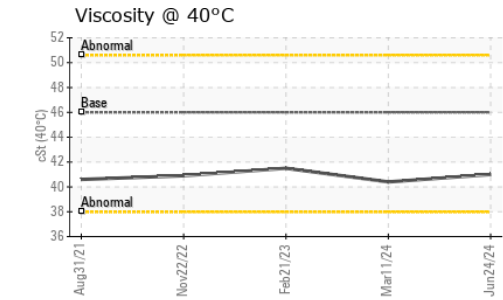
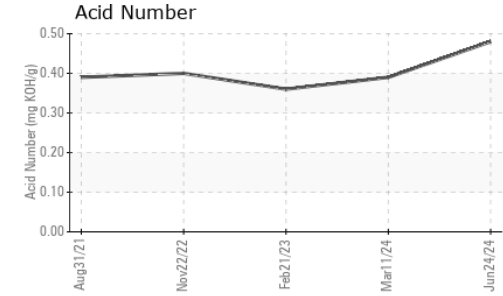
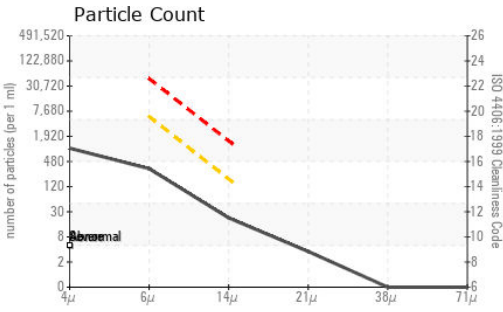
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	3	4	8
Potassium	ppm	ASTM D5185m	>20	0	0	0
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647		876	456	45316
Particles >6µm		ASTM D7647	>5000	284	110	▲ 11897
Particles >14µm		ASTM D7647	>160	19	7	▲ 402
Particles >21µm		ASTM D7647	>40	3	1	▲ 58
Particles >38µm		ASTM D7647	>10	0	0	6
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>-/19/14	17/15/11	16/14/10	▲ 23/21/16
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	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	3
Boron	ppm	ASTM D5185m	14	1	1	0
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.0	1	2	<1
Manganese	ppm	ASTM D5185m	0.0	0	<1	<1
Magnesium	ppm	ASTM D5185m	2.6	22	26	48
Calcium	ppm	ASTM D5185m	49	101	104	90
Phosphorus	ppm	ASTM D5185m	354	338	335	360
Zinc	ppm	ASTM D5185m	419	433	354	438
Sulfur	ppm	ASTM D5185m	3719	2596	2992	4430
Acid Number (AN)	mg KOH/g	ASTM D8045		0.48	0.39	0.36
Visc @ 40°C	cSt	ASTM D445	46	41.0	40.4	41.5



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ML0002529
Lab Number : 06221802
Unique Number : 11099999
Test Package : CONST
Received : 26 Jun 2024
Tested : 28 Jun 2024
Diagnosed : 28 Jun 2024 - Don Baldrige

MCCLEUNG-LOGAN EQUIPMENT CO - RICHMOND
 1345 MOUNTAIN ROAD
 GLEN ALLEN, VA
 US 23060
 Contact: KYLE RATLIFFE
 KRATLIFFE@MCCLEUNG-LOGAN.COM
 T:
 F: (804)266-1611

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)