



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
VOLVO A45G 342044
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		ML0002787	VCP401300	VCP276071
Sample Date		Client Info		12 Jun 2024	02 Feb 2023	10 Jul 2020
Machine Age	hrs	Client Info		10882	8248	4237
Oil Age	hrs	Client Info		2149	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	Changed	Changed
Filter Changed		Client Info		N/A	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	16	13	16
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>10	<1	0	<1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	6	6	6
Lead	ppm	ASTM D5185m	>20	1	2	4
Copper	ppm	ASTM D5185m	>150	8	8	12
Tin	ppm	ASTM D5185m	>20	0	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

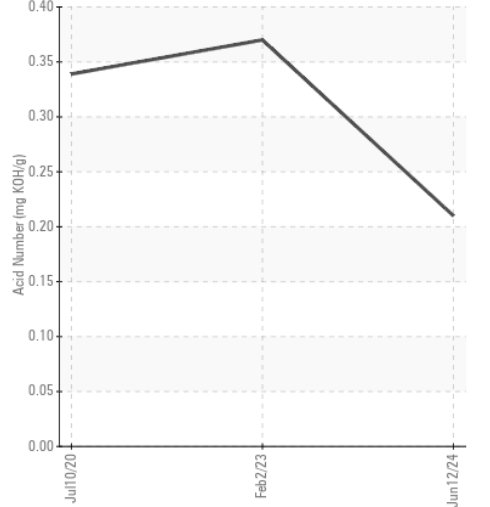
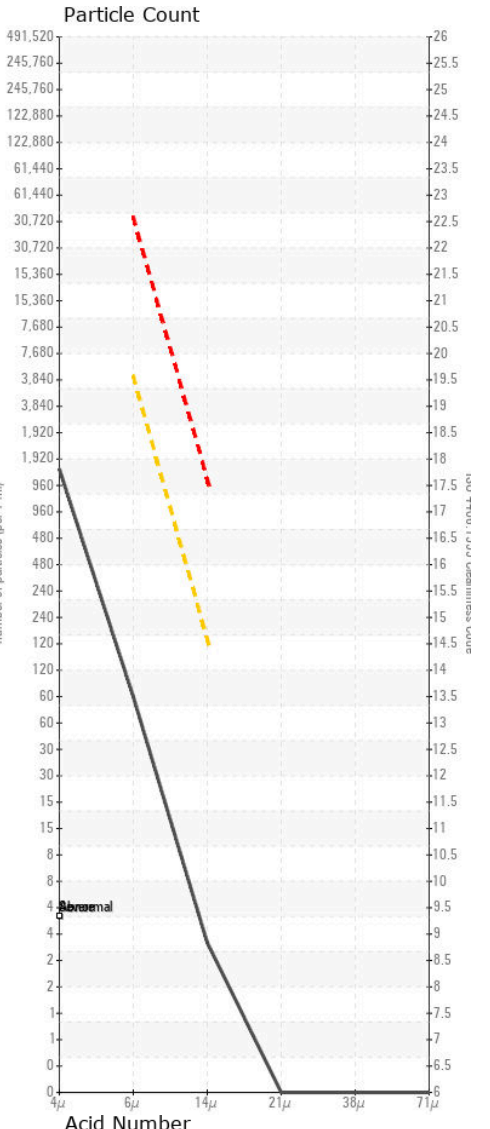
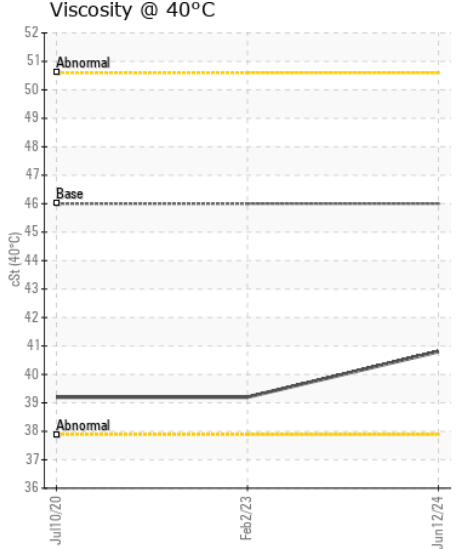
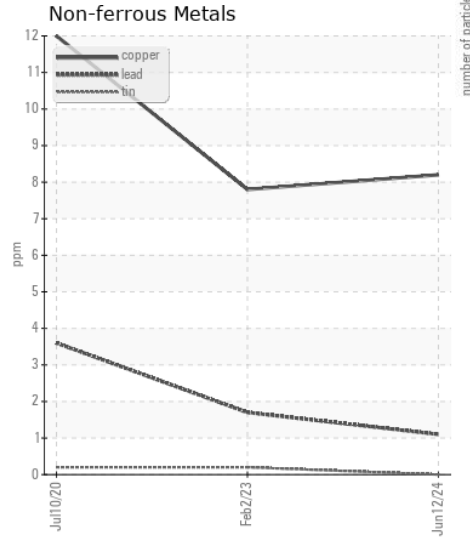
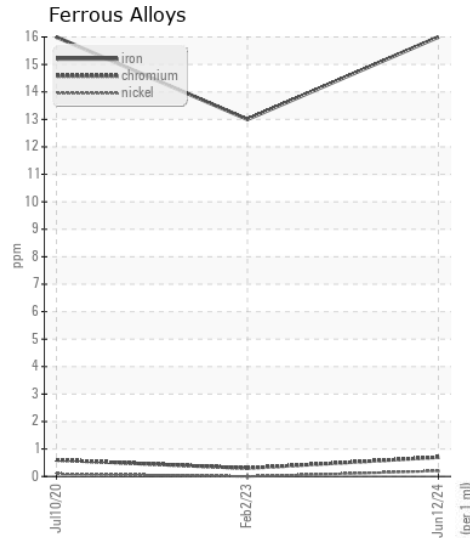
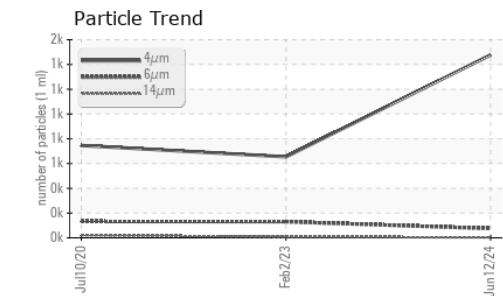
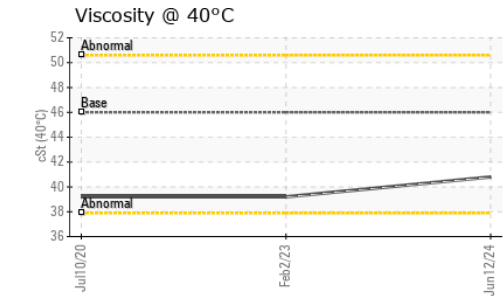
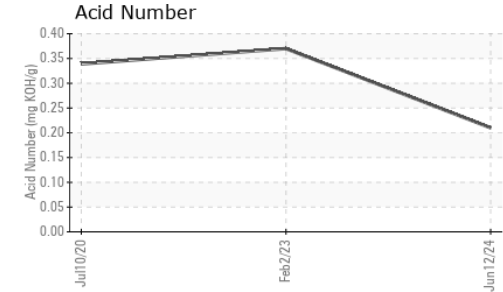
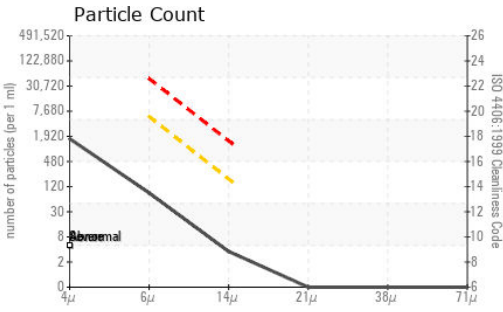
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	15	15	14
Potassium	ppm	ASTM D5185m	>20	4	<1	<1
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647		1477	654	746
Particles >6µm		ASTM D7647	>5000	75	130	132
Particles >14µm		ASTM D7647	>160	3	7	21
Particles >21µm		ASTM D7647	>40	0	2	7
Particles >38µm		ASTM D7647	>10	0	0	1
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>-/19/14	18/13/9	17/14/10	17/14/12
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	VLITE
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		1	2	2
Boron	ppm	ASTM D5185m	14	6	0	2
Barium	ppm	ASTM D5185m	0.0	<1	0	<1
Molybdenum	ppm	ASTM D5185m	0.0	4	1	<1
Manganese	ppm	ASTM D5185m	0.0	0	<1	<1
Magnesium	ppm	ASTM D5185m	2.6	25	9	2
Calcium	ppm	ASTM D5185m	49	208	93	79
Phosphorus	ppm	ASTM D5185m	354	364	316	313
Zinc	ppm	ASTM D5185m	419	456	393	442
Sulfur	ppm	ASTM D5185m	3719	1832	3177	4193
Acid Number (AN)	mg KOH/g	ASTM D8045		0.21	0.37	0.339
Visc @ 40°C	cSt	ASTM D445	46	40.8	39.2	39.2



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ML0002787 **Received** : 14 Jun 2024
Lab Number : 06210695 **Tested** : 18 Jun 2024
Unique Number : 11083559 **Diagnosed** : 18 Jun 2024 - Angela Borella
Test Package : CONST

MCCLEUNG-LOGAN EQUIPMENT CO - RICHMOND
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 GLEN ALLEN, VA
 US 23060
 Contact: KYLE RATLIFFE
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Certificate L2367
 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)