



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
[W05004101]
 Machine Id
VOLVO A45G 342679
 Component
Hydraulic System
 Fluid
VOLVO SUPER HYDRAULIC OIL 46 (50 GAL)

RECOMMENDATION

Resample at the next service interval to monitor. (Customer Sample Comment: W05004101)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0886250	VCP362966	VCP323357
Sample Date		Client Info		19 Mar 2024	09 May 2022	17 Aug 2021
Machine Age	hrs	Client Info		8663	4641	1928
Oil Age	hrs	Client Info		2000	0	0
Filter Age	hrs	Client Info		2000	0	0
Oil Changed		Client Info		Changed	Changed	Not Changed
Filter Changed		Client Info		Not Changed	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	13	8	4
Chromium	ppm	ASTM D5185m	>20	0	<1	0
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	8	5	<1
Lead	ppm	ASTM D5185m	>20	<1	1	2
Copper	ppm	ASTM D5185m	>150	4	2	2
Tin	ppm	ASTM D5185m	>20	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

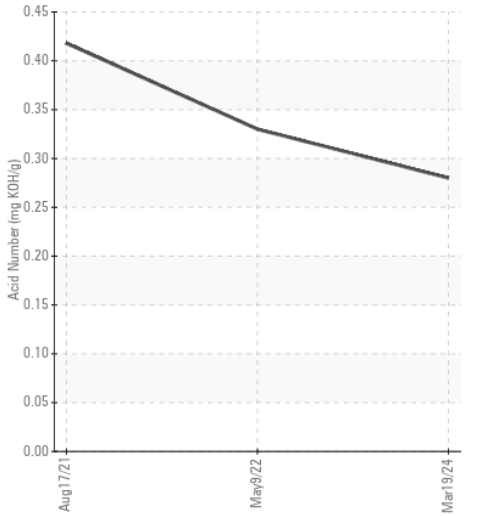
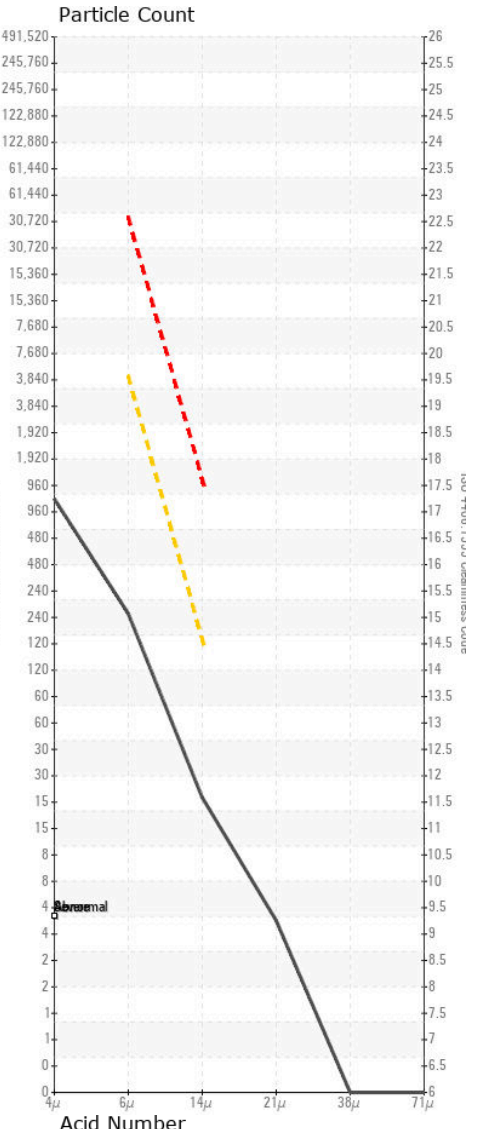
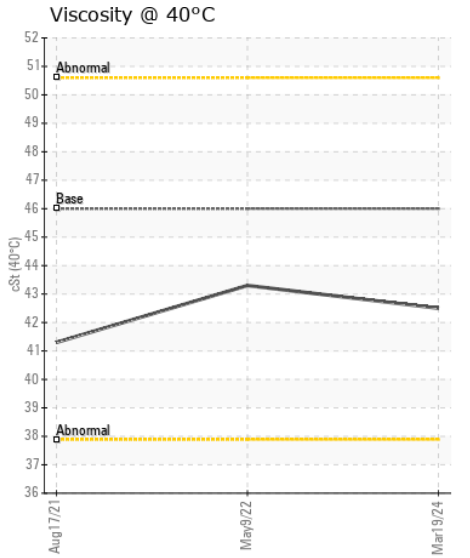
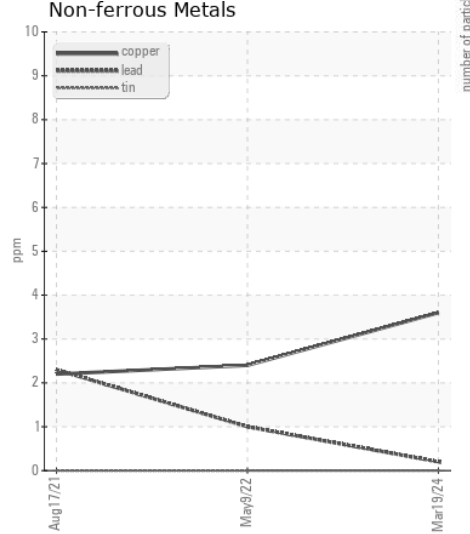
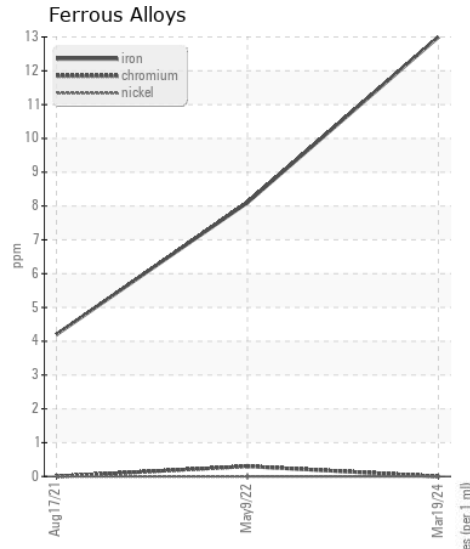
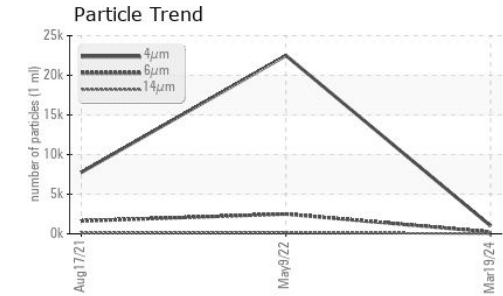
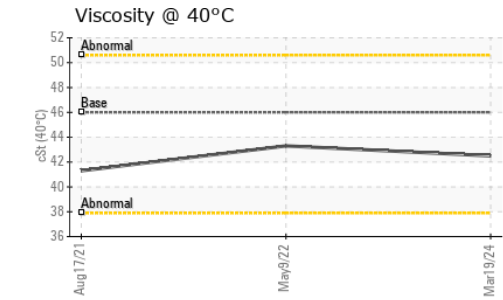
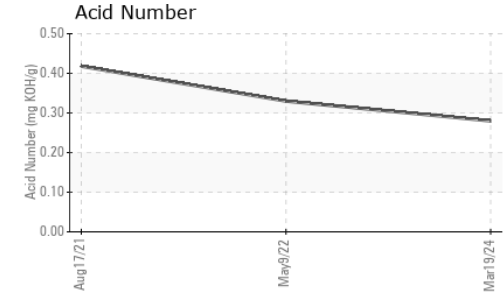
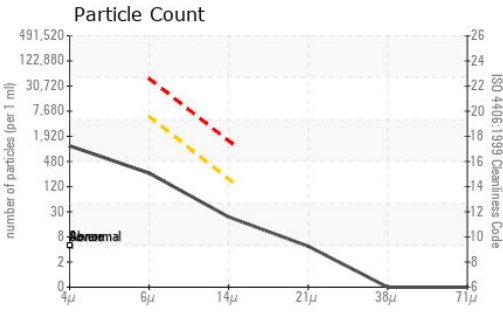
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>20	15	8	6
Potassium	ppm	ASTM D5185m	>20	<1	2	0
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647		998	22497	7755
Particles >6µm		ASTM D7647	>5000	222	2491	1617
Particles >14µm		ASTM D7647	>160	20	150	83
Particles >21µm		ASTM D7647	>40	4	31	16
Particles >38µm		ASTM D7647	>10	0	2	2
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>-/19/14	17/15/11	22/18/14	20/18/14
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	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	0	3
Boron	ppm	ASTM D5185m	14	2	4	27
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.0	0	<1	<1
Manganese	ppm	ASTM D5185m	0.0	0	<1	0
Magnesium	ppm	ASTM D5185m	2.6	3	2	3
Calcium	ppm	ASTM D5185m	49	188	154	405
Phosphorus	ppm	ASTM D5185m	354	387	362	387
Zinc	ppm	ASTM D5185m	419	432	479	519
Sulfur	ppm	ASTM D5185m	3719	2674	2244	3252
Acid Number (AN)	mg KOH/g	ASTM D8045		0.28	0.33	0.418
Visc @ 40°C	cSt	ASTM D445	46	42.5	43.3	41.3



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0886250 **Received** : 20 Mar 2024
Lab Number : 06124277 **Tested** : 21 Mar 2024
Unique Number : 10938428 **Diagnosed** : 23 Mar 2024 - Don Baldrige
Test Package : MOBCE

MCCLEUNG-LOGAN EQUIPMENT CO - MANASSAS
 8450 QUARRY ROAD
 MANASSAS, VA
 US 20110
 Contact: MIKE MAYHUGH
 MMAYHUGH@MCCLEUNG-LOGAN.COM
 T: (703)393-7344
 F: (703)393-7844

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)