



# VOLVO

## OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>



Area  
**[SWO-071765]**  
 Machine Id  
**VOLVO A45G 342546**  
 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		<b>VCP450901</b>	VCP432931	VCP417741
Sample Date		Client Info		<b>07 May 2024</b>	04 Oct 2023	19 Jun 2023
Machine Age	hrs	Client Info		<b>8542</b>	8046	7553
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>Changed</b>	Not Changd	Not Changd
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<b>4</b>	2	3
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	<1	<1
Lead	ppm	ASTM D5185m	>20	<b>2</b>	1	<1
Copper	ppm	ASTM D5185m	>150	<b>2</b>	2	1
Tin	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

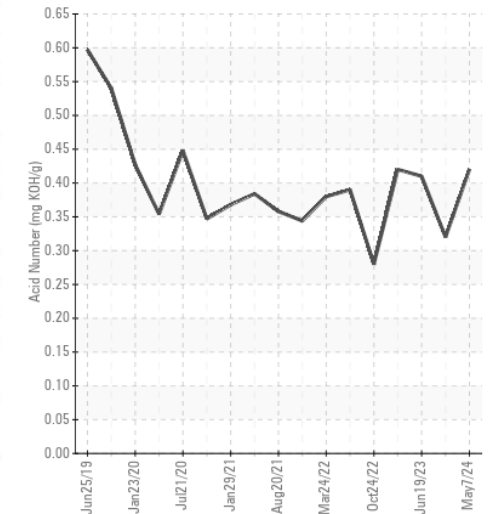
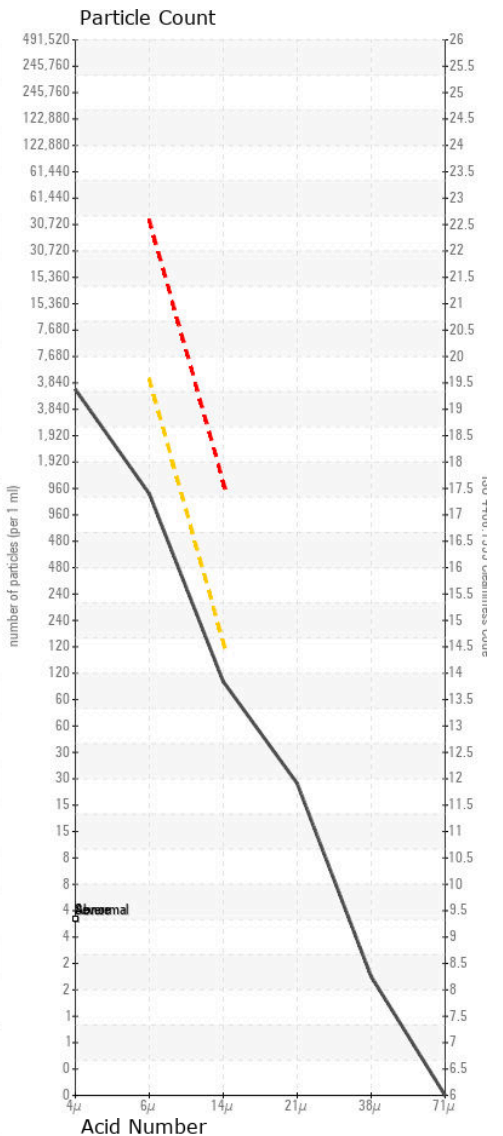
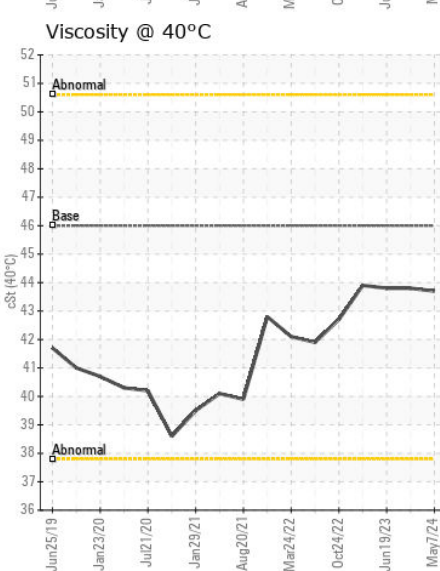
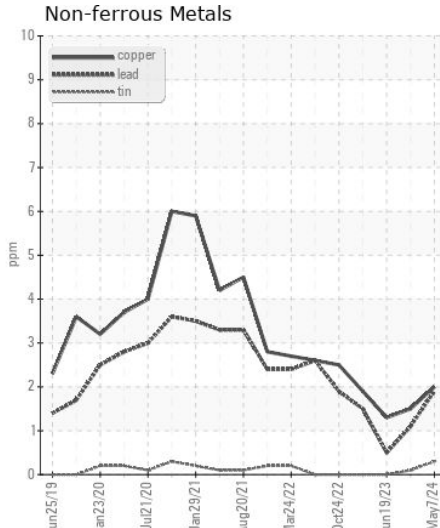
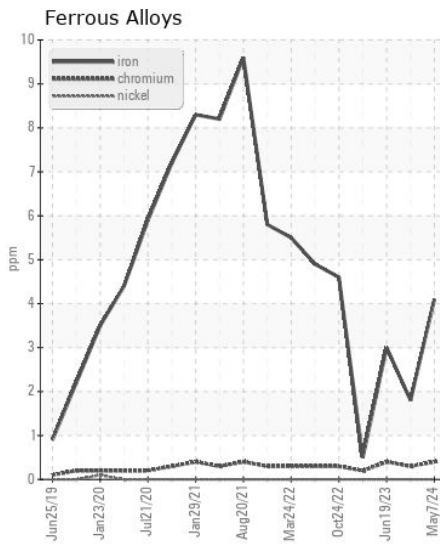
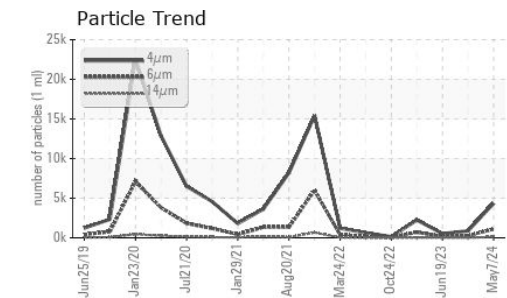
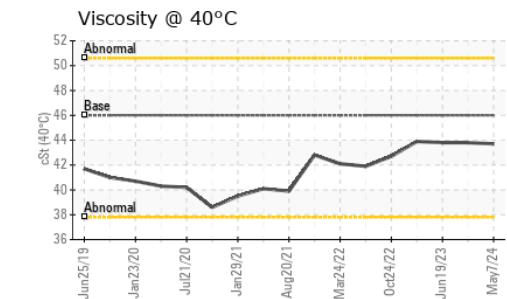
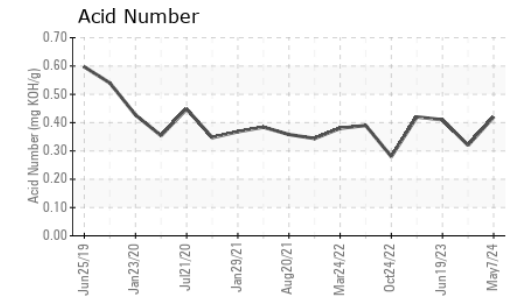
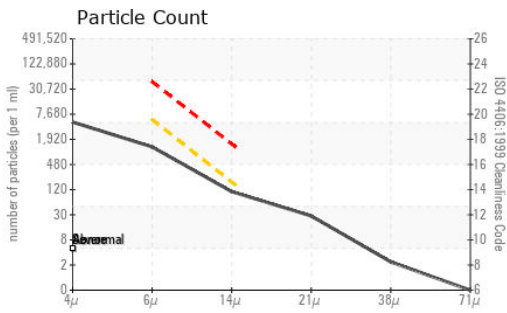
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>20	<b>4</b>	3	3
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	0	<1
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647		<b>4348</b>	877	523
Particles >6µm		ASTM D7647	>5000	<b>1109</b>	261	152
Particles >14µm		ASTM D7647	>160	<b>95</b>	22	22
Particles >21µm		ASTM D7647	>40	<b>25</b>	7	7
Particles >38µm		ASTM D7647	>10	<b>2</b>	0	1
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>-/19/14	<b>19/17/14</b>	17/15/12	16/14/12
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	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		<b>0</b>	2	1
Boron	ppm	ASTM D5185m	14	<b>0</b>	<1	0
Barium	ppm	ASTM D5185m	0.0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0.0	<b>1</b>	0	1
Manganese	ppm	ASTM D5185m	0.0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	2.6	<b>10</b>	10	6
Calcium	ppm	ASTM D5185m	49	<b>92</b>	86	80
Phosphorus	ppm	ASTM D5185m	354	<b>357</b>	343	365
Zinc	ppm	ASTM D5185m	419	<b>452</b>	450	479
Sulfur	ppm	ASTM D5185m	3719	<b>2685</b>	2498	3462
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.42</b>	0.32	0.41
Visc @ 40°C	cSt	ASTM D445	46	<b>43.7</b>	43.8	43.8



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : VCP450901

Lab Number : 06175404

Unique Number : 11021457

Test Package : MOB 2

Received : 10 May 2024

Tested : 13 May 2024

Diagnosed : 14 May 2024 - Don Baldrige

SAIIA CONSTRUCTION LLC

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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)