



# VOLVO

## OIL ANALYSIS REPORT

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



Area  
**[634367]**  
 Machine Id  
**VOLVO A40G 352842**  
 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>VCP440784</b>	VCP410230	VCP386345
Sample Date		Client Info		<b>27 Nov 2023</b>	11 May 2023	13 Oct 2022
Machine Age	hrs	Client Info		<b>4010</b>	3070	1984
Oil Age	hrs	Client Info		<b>4010</b>	0	1984
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	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<b>8</b>	9	5
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>1</b>	0	<1
Lead	ppm	ASTM D5185m	>20	<b>3</b>	4	3
Copper	ppm	ASTM D5185m	>150	<b>3</b>	3	2
Tin	ppm	ASTM D5185m	>20	<b>0</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

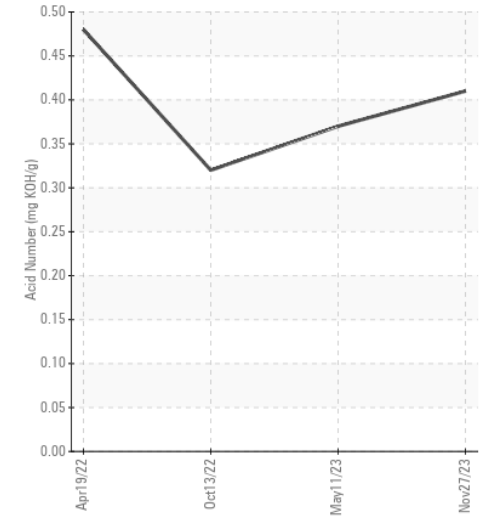
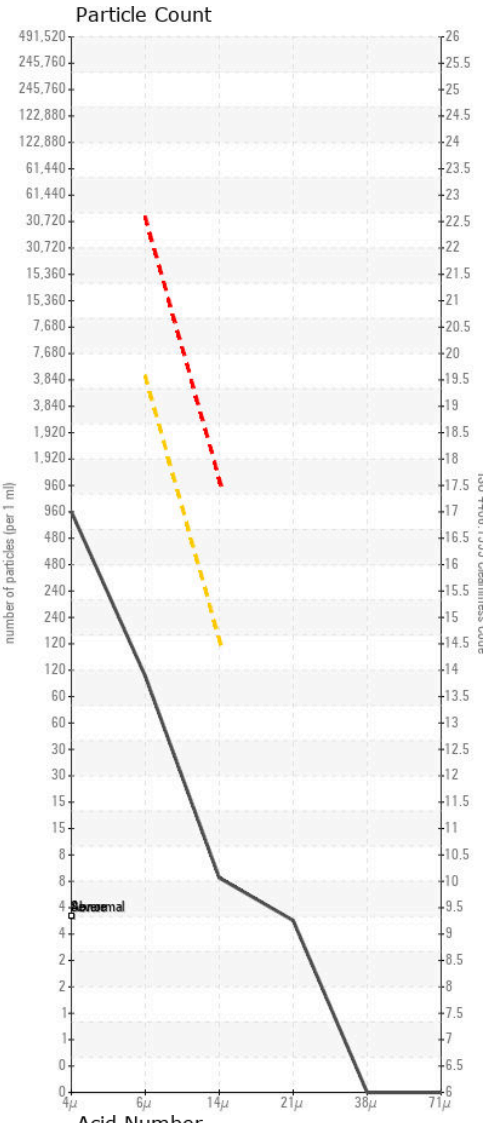
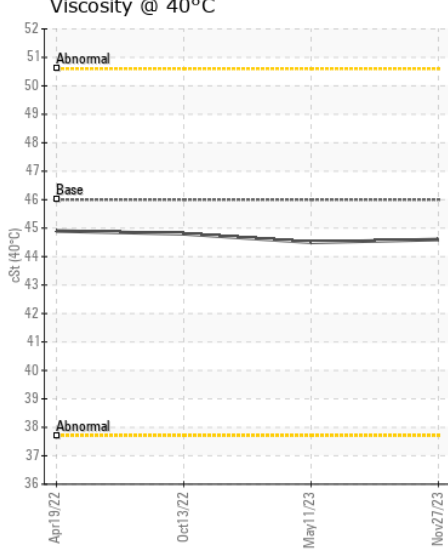
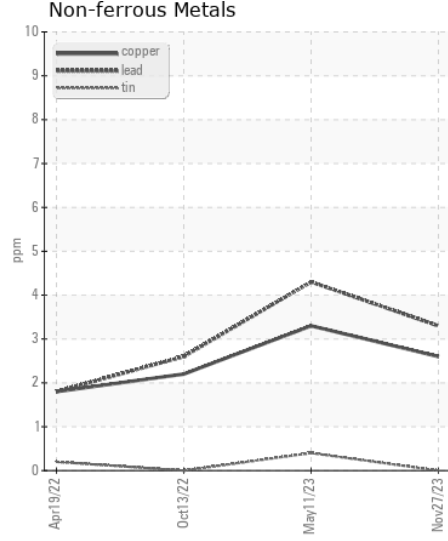
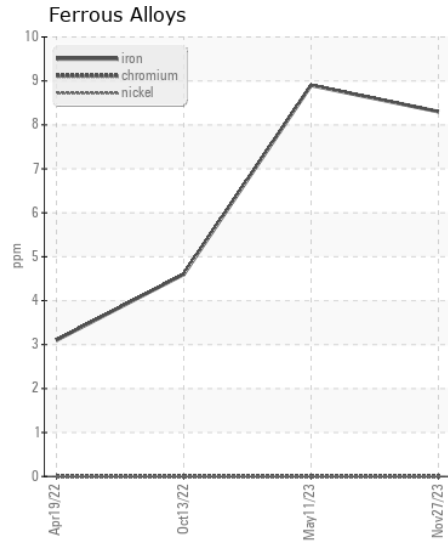
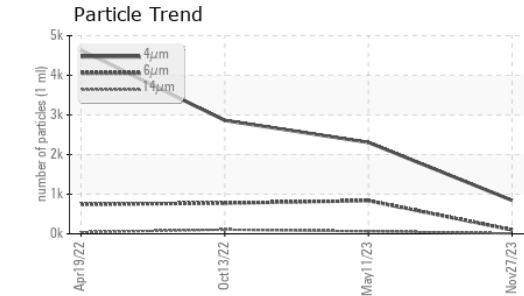
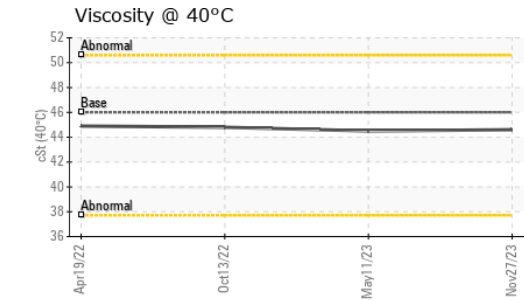
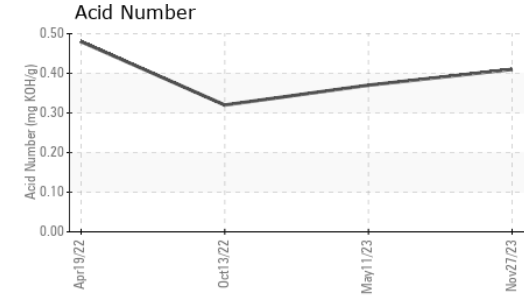
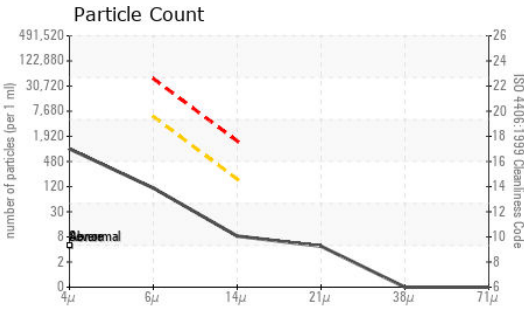
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	<b>5</b>	7	4
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647		<b>844</b>	2306	2863
Particles >6µm		ASTM D7647	>5000	<b>98</b>	836	775
Particles >14µm		ASTM D7647	>160	<b>7</b>	64	105
Particles >21µm		ASTM D7647	>40	<b>4</b>	13	30
Particles >38µm		ASTM D7647	>10	<b>0</b>	0	3
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>-/19/14	<b>17/14/10</b>	18/17/13	19/17/14
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>2</b>	0	0
Boron	ppm	ASTM D5185m	14	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	0.0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0.0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	0.0	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m	2.6	<b>2</b>	2	<1
Calcium	ppm	ASTM D5185m	49	<b>75</b>	77	61
Phosphorus	ppm	ASTM D5185m	354	<b>356</b>	444	347
Zinc	ppm	ASTM D5185m	419	<b>438</b>	603	442
Sulfur	ppm	ASTM D5185m	3719	<b>1547</b>	2365	1784
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.41</b>	0.37	0.32
Visc @ 40°C	cSt	ASTM D445	46	<b>44.6</b>	44.5	44.8



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : VCP440784 **Received** : 17 Jan 2024  
**Lab Number** : 06062589 **Diagnosed** : 18 Jan 2024  
**Unique Number** : 10833971 **Diagnostician** : Wes Davis  
**Test Package** : MOB 2

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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)