



# VOLVO

## OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL



Area  
**[SWO071176]**  
 Machine Id  
**VOLVO A45G 352734**  
 Component  
**Hydraulic System**  
 Fluid  
**AW HYDRAULIC OIL ISO 46 (--- GAL)**

### RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP388197	VCP426211	VCP382599
Sample Date		Client Info		12 Apr 2024	21 Aug 2023	27 Apr 2023
Machine Age	hrs	Client Info		4585	3997	3463
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changed	Changed	Not Changed
Filter Changed		Client Info		Not Changed	Changed	Not Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	5	9	2
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	<1	2	<1
Lead	ppm	ASTM D5185m	>20	1	4	0
Copper	ppm	ASTM D5185m	>150	1	3	6
Tin	ppm	ASTM D5185m	>20	0	<1	0
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

### CONTAMINATION

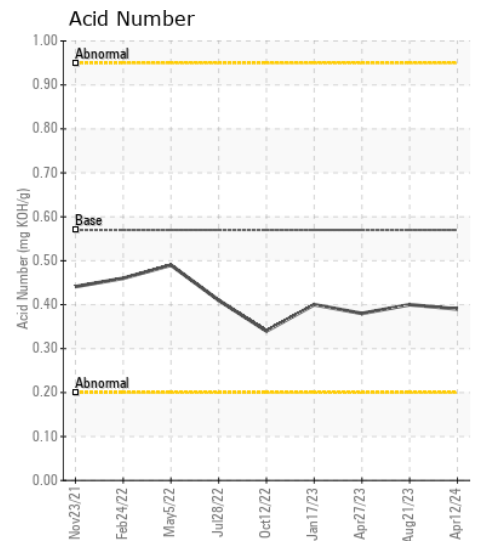
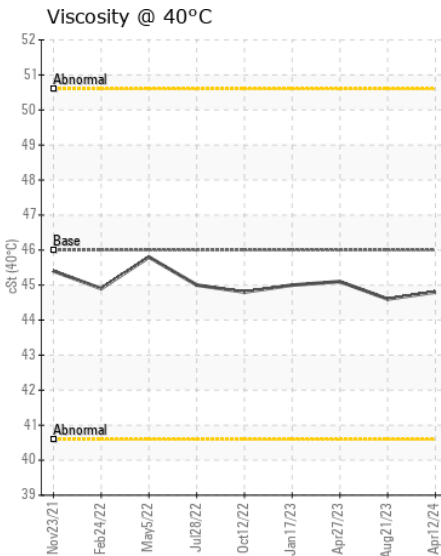
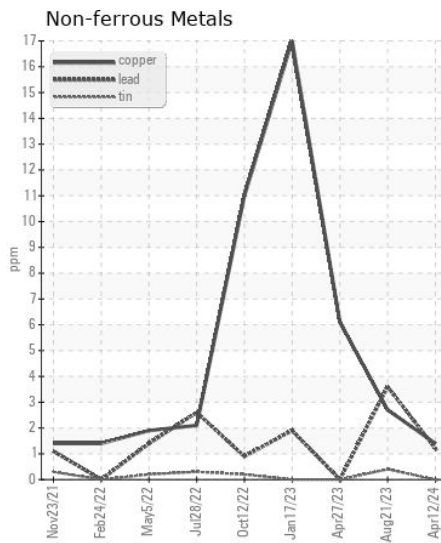
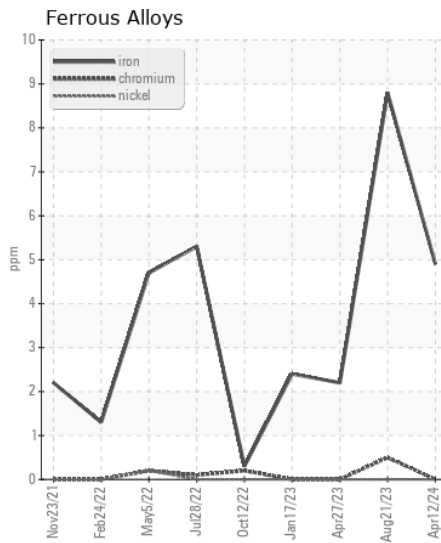
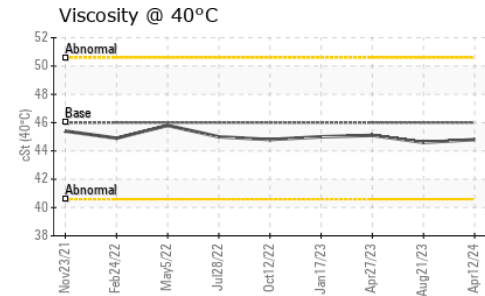
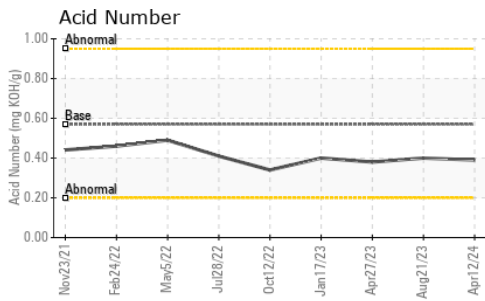
Moderate concentration of visible dirt/debris present in the oil.

Silicon	ppm	ASTM D5185m	>20	3	7	5
Potassium	ppm	ASTM D5185m	>20	4	2	<1
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647		---	2630	3217
Particles >6µm		ASTM D7647	>5000	---	501	1025
Particles >14µm		ASTM D7647	>160	---	19	105
Particles >21µm		ASTM D7647	>40	---	6	24
Particles >38µm		ASTM D7647	>10	---	0	2
Particles >71µm		ASTM D7647	>3	---	0	0
Oil Cleanliness		ISO 4406 (c)	>-/19/14	---	19/16/11	19/17/14
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	MODER	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	2	<1
Boron	ppm	ASTM D5185m	5	0	0	0
Barium	ppm	ASTM D5185m	5	<1	0	0
Molybdenum	ppm	ASTM D5185m	5	0	<1	0
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m	25	1	8	8
Calcium	ppm	ASTM D5185m	200	64	71	51
Phosphorus	ppm	ASTM D5185m	300	307	350	293
Zinc	ppm	ASTM D5185m	370	393	459	363
Sulfur	ppm	ASTM D5185m	2500	1656	1808	1232
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.39	0.40	0.38
Visc @ 40°C	cSt	ASTM D445	46	44.8	44.6	45.1



Certificate L2367

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

**Sample No.** : VCP388197

**Lab Number** : 06151926

**Unique Number** : 10982004

**Test Package** : MOB 2

**Received** : 17 Apr 2024

**Tested** : 19 Apr 2024

**Diagnosed** : 19 Apr 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)