



# VOLVO

## OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

[SWO-070501]

Machine Id

EPIROC TMG21SED0346

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		VCP455401	VCP452465	VCP446723
Sample Date		Client Info		17 Mar 2024	11 Mar 2024	05 Feb 2024
Machine Age	hrs	Client Info		5276	5253	5020
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Filter Changed		Client Info		Changed	Not Changd	Not Changd
Sample Status				NORMAL	ABNORMAL	ABNORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	5	4	4
Chromium	ppm	ASTM D5185m	>10	<1	0	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	>10	0	0	0
Lead	ppm	ASTM D5185m	>10	0	1	0
Copper	ppm	ASTM D5185m	>75	3	2	2
Tin	ppm	ASTM D5185m	>10	<1	<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

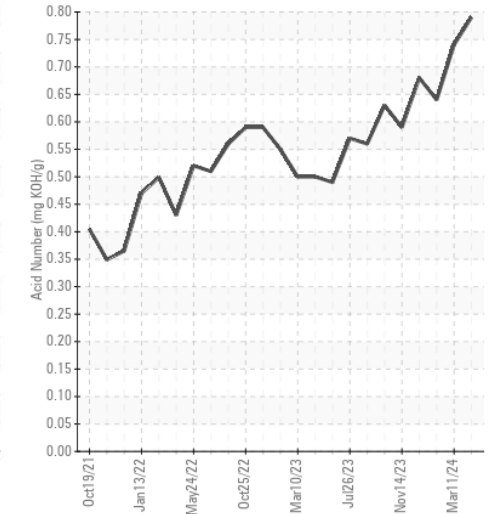
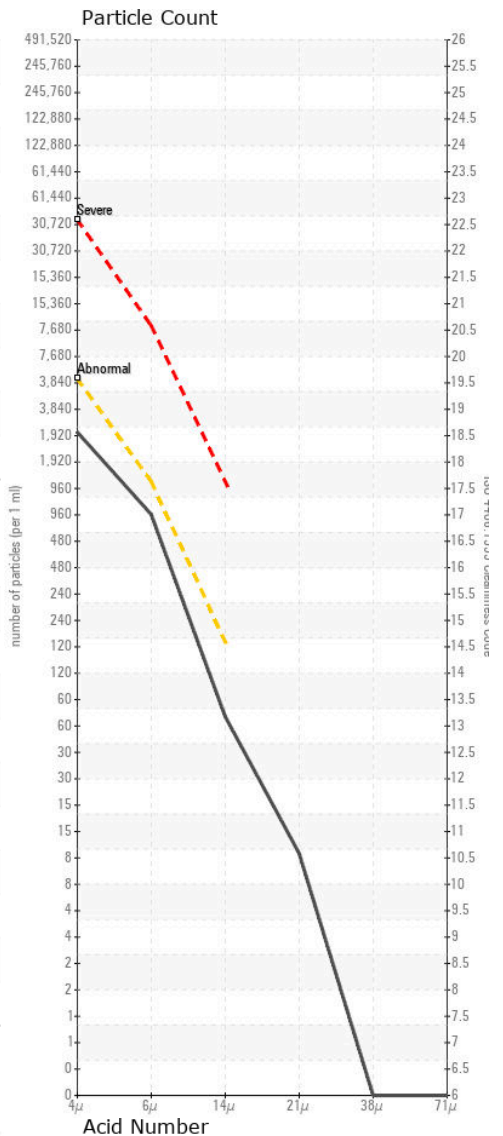
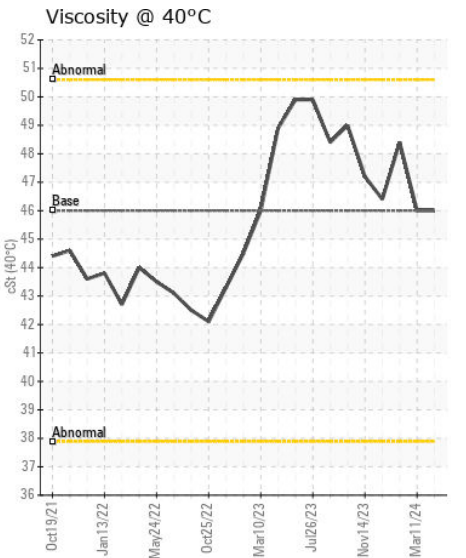
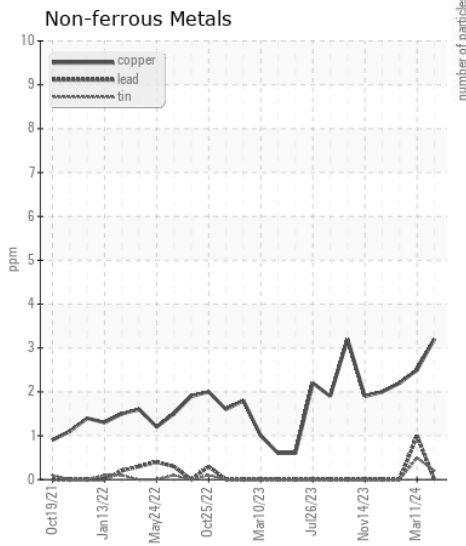
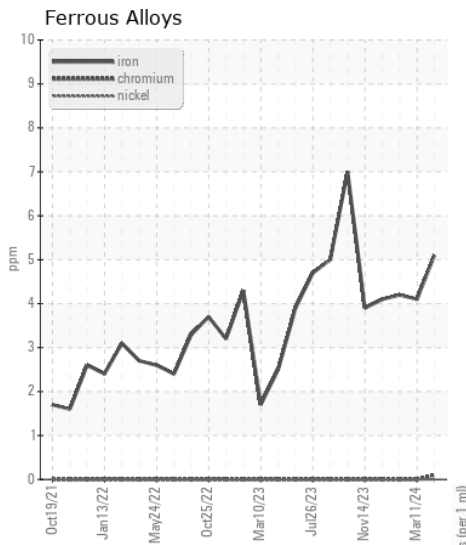
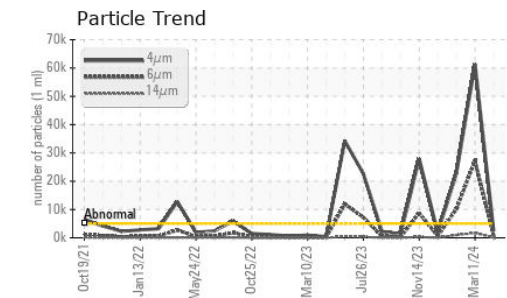
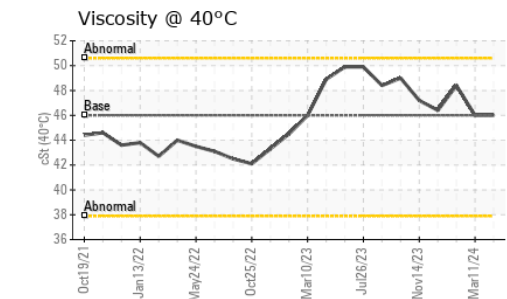
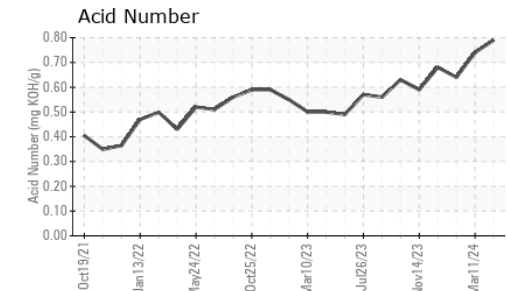
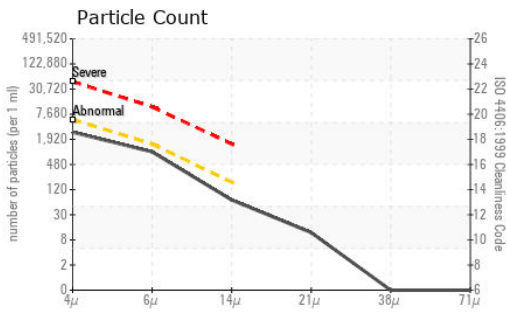
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	7	6	8
Potassium	ppm	ASTM D5185m	>20	0	0	0
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	2483	▲ 61333	▲ 22777
Particles >6µm		ASTM D7647	>1300	845	▲ 27201	▲ 10170
Particles >14µm		ASTM D7647	>160	60	▲ 1705	▲ 973
Particles >21µm		ASTM D7647	>40	10	▲ 180	▲ 160
Particles >38µm		ASTM D7647	>10	0	0	2
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	18/17/13	▲ 23/22/18	▲ 22/21/17
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	LIGHT
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	1
Boron	ppm	ASTM D5185m	14	0	0	<1
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.0	2	1	<1
Manganese	ppm	ASTM D5185m	0.0	<1	<1	0
Magnesium	ppm	ASTM D5185m	2.6	112	94	118
Calcium	ppm	ASTM D5185m	49	103	94	97
Phosphorus	ppm	ASTM D5185m	354	531	501	512
Zinc	ppm	ASTM D5185m	419	712	548	678
Sulfur	ppm	ASTM D5185m	3719	2187	1940	1983
Acid Number (AN)	mg KOH/g	ASTM D8045		0.79	0.74	0.64
Visc @ 40°C	cSt	ASTM D445	46	46.0	46.0	48.4



Certificate L2367

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

Sample No. : VCP455401

Lab Number : 06124823

Unique Number : 10938974

Test Package : MOB 2

Received : 21 Mar 2024

Tested : 22 Mar 2024

Diagnosed : 24 Mar 2024 - Don Baldrige

SAIIA CONSTRUCTION LLC

4400 LEWISBURG RD

BIRMINGHAM, AL

US 35207

Contact: STEPHANI BRITTON

sbritton@saiia.com;doug.bogart@wearch.com

T: (205)943-2268

F: (205)943-2269

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)