



# VOLVO

## OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area

[5]

Machine Id

**VOLVO L110H 631239**

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		VCP438544	VCP415941	VCP390712
Sample Date		Client Info		04 Jul 2024	22 Jun 2023	25 Oct 2022
Machine Age	hrs	Client Info		10281	9267	8302
Oil Age	hrs	Client Info		0	0	4000
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	Not Changd	Changed
Filter Changed		Client Info		N/A	Not Changd	Changed
Sample Status				NORMAL	SEVERE	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	1	3	4
Chromium	ppm	ASTM D5185m	>20	0	0	<1
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	0	<1	<1
Lead	ppm	ASTM D5185m	>20	0	0	<1
Copper	ppm	ASTM D5185m	>150	0	1	1
Tin	ppm	ASTM D5185m	>20	0	0	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

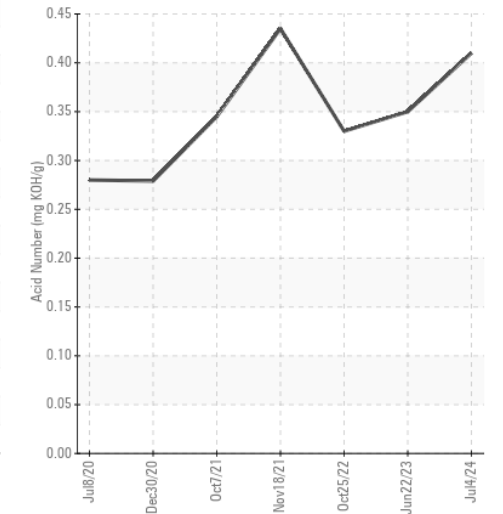
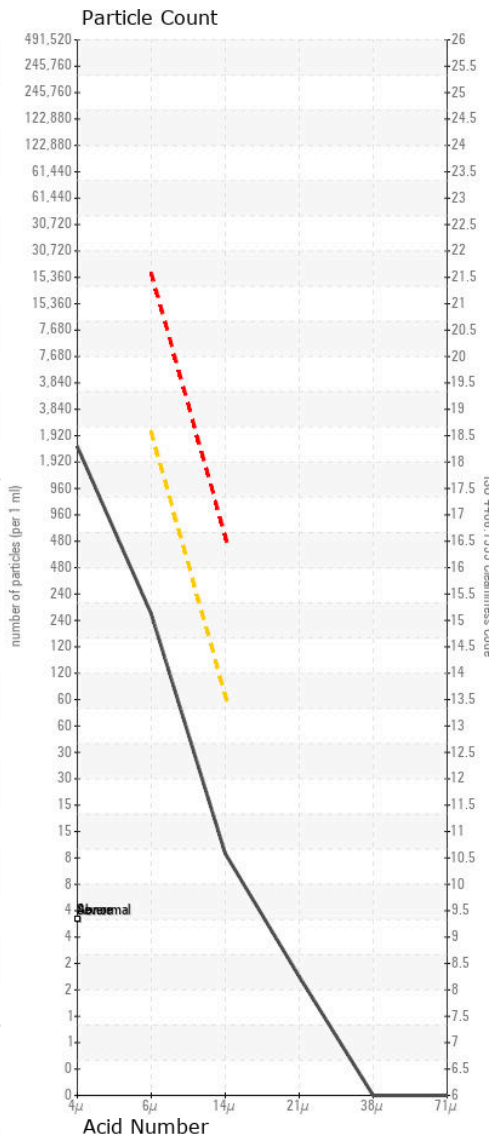
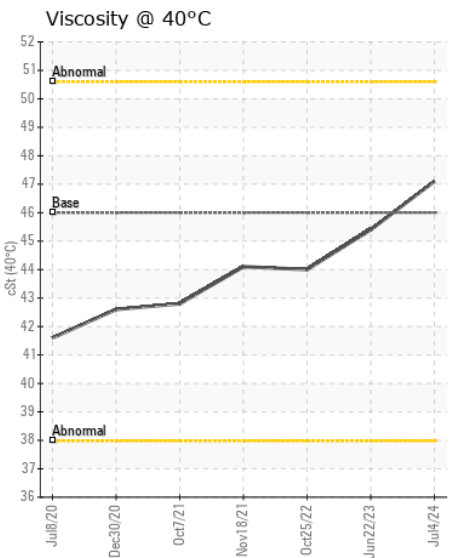
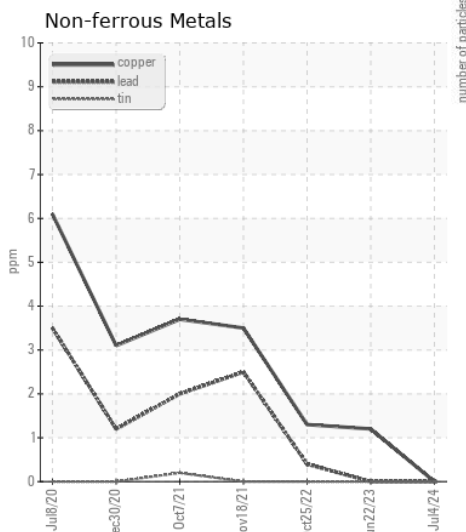
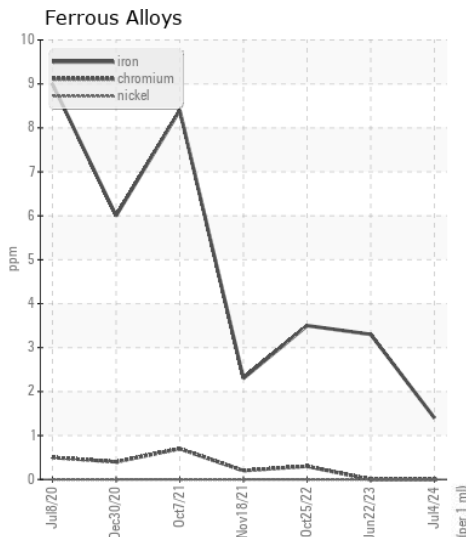
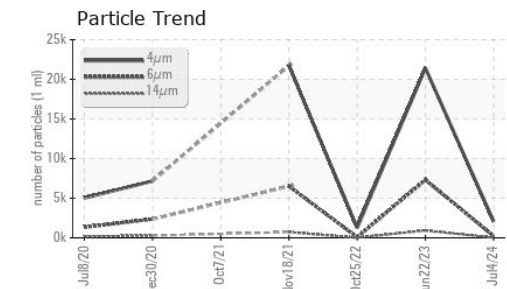
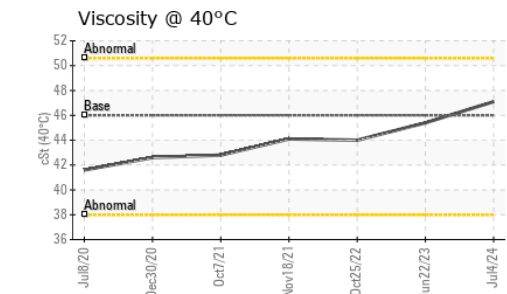
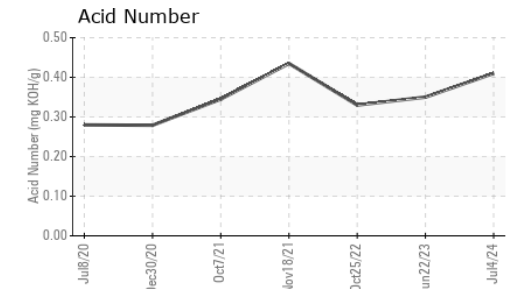
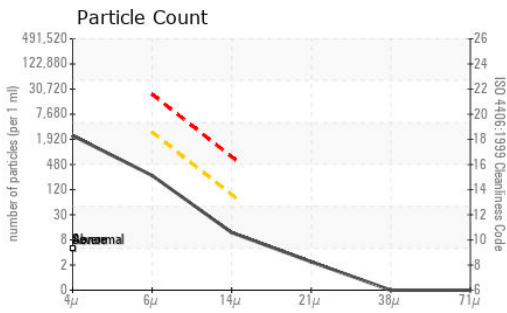
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	2	2	2
Potassium	ppm	ASTM D5185m	>20	0	0	0
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647		2057	21423	1271
Particles >6µm		ASTM D7647	>2500	230	▲ 7315	73
Particles >14µm		ASTM D7647	>80	10	▲ 916	9
Particles >21µm		ASTM D7647	>20	2	▲ 243	3
Particles >38µm		ASTM D7647	>4	0	6	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>-/18/13	18/15/10	▲ 22/20/17	17/13/10
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	2	<1
Boron	ppm	ASTM D5185m	14	5	3	0
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.0	10	18	<1
Manganese	ppm	ASTM D5185m	0.0	0	0	0
Magnesium	ppm	ASTM D5185m	2.6	19	16	0
Calcium	ppm	ASTM D5185m	49	123	98	36
Phosphorus	ppm	ASTM D5185m	354	384	364	319
Zinc	ppm	ASTM D5185m	419	495	444	384
Sulfur	ppm	ASTM D5185m	3719	2280	2430	1984
Acid Number (AN)	mg KOH/g	ASTM D8045		0.41	0.35	0.33
Visc @ 40°C	cSt	ASTM D445	46	47.1	45.4	44.0



Certificate L2367

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

Sample No. : VCP438544

Lab Number : 06233205

Unique Number : 11116698

Test Package : MOB 2

Received : 11 Jul 2024

Tested : 12 Jul 2024

Diagnosed : 12 Jul 2024 - Wes Davis

RIPA AND ASSOCIATES

10149 FISHER AVENUE

TAMPA, FL

US 33619

Contact: PM Services

PMServices@ripaconstruction.com

T:

F:

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)