



VOLVO

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL



Area
[S50601799 IAA BAY PT]

Machine Id
VOLVO L90H 625920

Component
Hydraulic System

Fluid
VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP440836	VCP345497	---
Sample Date		Client Info		16 Feb 2024	02 Feb 2023	---
Machine Age	hrs	Client Info		3995	2243	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				ABNORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	2	3	---
Chromium	ppm	ASTM D5185m	>20	<1	<1	---
Nickel	ppm	ASTM D5185m	>10	0	0	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m	>20	0	0	---
Lead	ppm	ASTM D5185m	>20	0	2	---
Copper	ppm	ASTM D5185m	>20	1	2	---
Tin	ppm	ASTM D5185m	>20	0	0	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

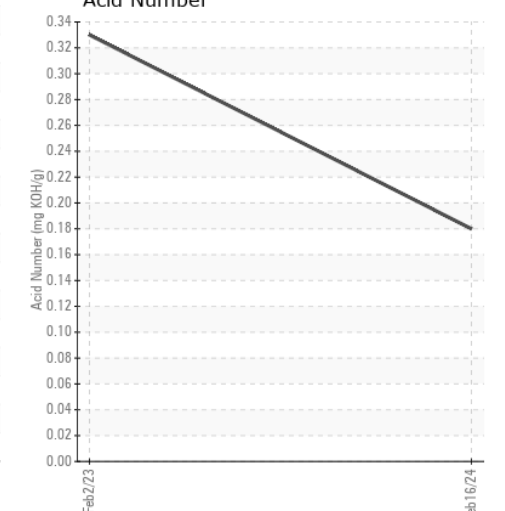
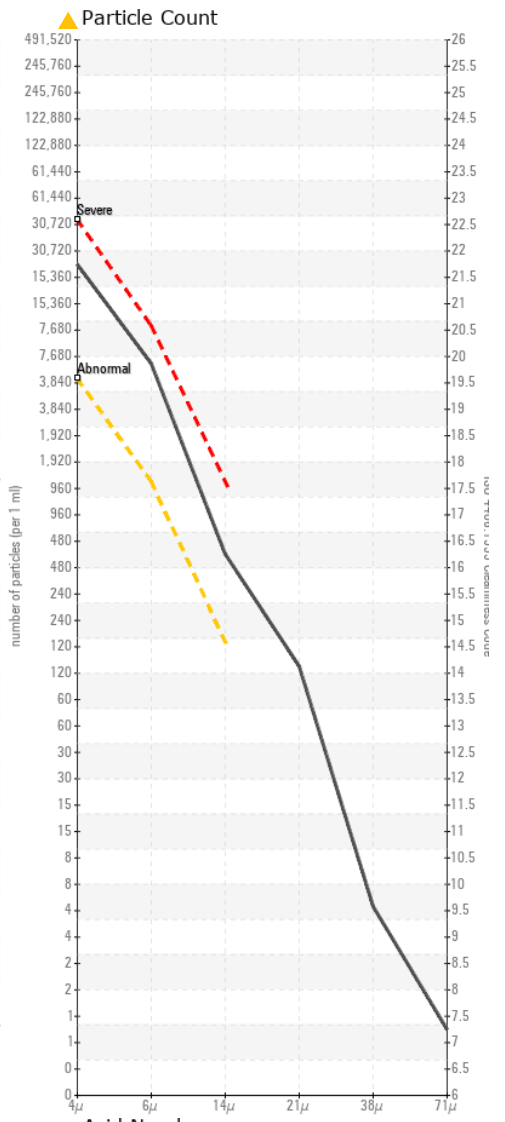
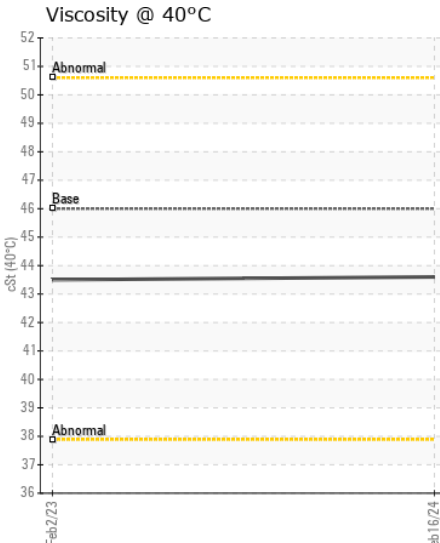
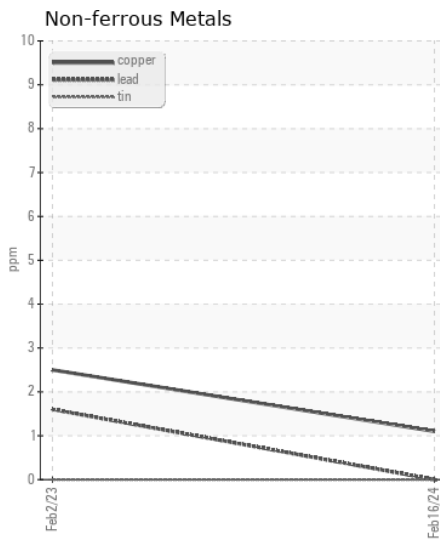
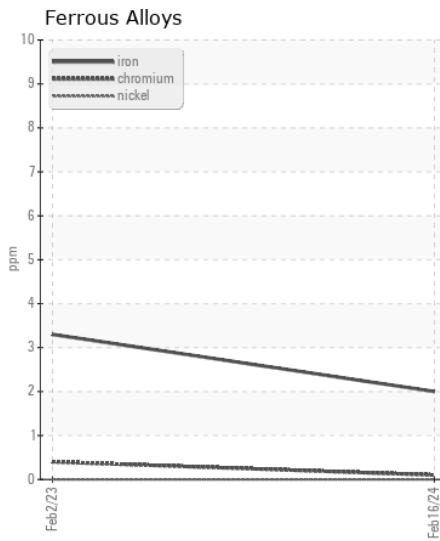
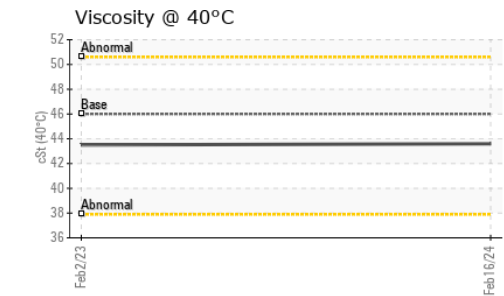
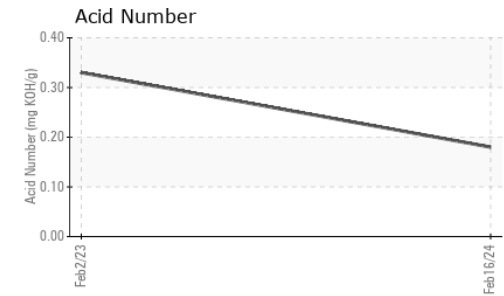
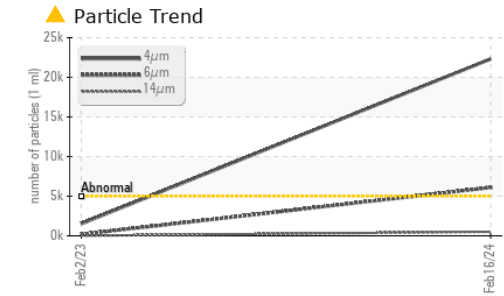
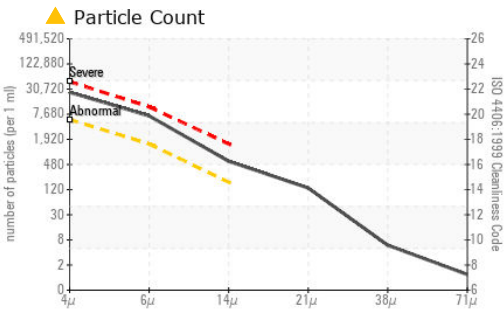
There is a moderate amount of particulates (2 to 100 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	3	3	---
Potassium	ppm	ASTM D5185m	>20	0	<1	---
Water		WC Method	>0.2	NEG	NEG	---
Particles >4µm		ASTM D7647	>5000	▲ 22317	1517	---
Particles >6µm		ASTM D7647	>1300	▲ 6091	181	---
Particles >14µm		ASTM D7647	>160	▲ 504	11	---
Particles >21µm		ASTM D7647	>40	▲ 116	2	---
Particles >38µm		ASTM D7647	>10	5	0	---
Particles >71µm		ASTM D7647	>3	1	0	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 22/20/16	18/15/11	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	LIGHT	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	---

FLUID CONDITION

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Sodium	ppm	ASTM D5185m		<1	0	---
Boron	ppm	ASTM D5185m	14	0	0	---
Barium	ppm	ASTM D5185m	0.0	0	<1	---
Molybdenum	ppm	ASTM D5185m	0.0	0	<1	---
Manganese	ppm	ASTM D5185m	0.0	0	0	---
Magnesium	ppm	ASTM D5185m	2.6	2	4	---
Calcium	ppm	ASTM D5185m	49	58	57	---
Phosphorus	ppm	ASTM D5185m	354	327	303	---
Zinc	ppm	ASTM D5185m	419	432	407	---
Sulfur	ppm	ASTM D5185m	3719	1943	1840	---
Acid Number (AN)	mg KOH/g	ASTM D8045		0.18	0.33	---
Visc @ 40°C	cSt	ASTM D445	46	43.6	43.5	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP440836
Lab Number : 06097628
Unique Number : 10890481
Test Package : MOB 2

Received : 22 Feb 2024
Tested : 23 Feb 2024
Diagnosed : 23 Feb 2024 - Wes Davis

VCES- VOLVO CONSTRUCTION EQUIPMENT
 1944 MARINA BLVD
 SAN LEANDRO, CA
 US 94577
 Contact: JOHN BUDESILICH
 john.budesilich@vcesvolvo.com

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)

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