



VOLVO

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL



Machine Id
VOLVO L90H 625035
Component
Hydraulic System
Fluid
VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)

RECOMMENDATION

We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP444259	VCP379683	---
Sample Date		Client Info		15 Feb 2024	30 Jan 2023	---
Machine Age	hrs	Client Info		3984	3010	---
Oil Age	hrs	Client Info		0	1500	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		N/A	Not Changd	---
Filter Changed		Client Info		N/A	Not Changd	---
Sample Status				ABNORMAL	ABNORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	2	7	---
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	<1	---
Aluminum	ppm	ASTM D5185m	>20	0	<1	---
Lead	ppm	ASTM D5185m	>20	<1	2	---
Copper	ppm	ASTM D5185m	>150	<1	3	---
Tin	ppm	ASTM D5185m	>20	<1	0	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

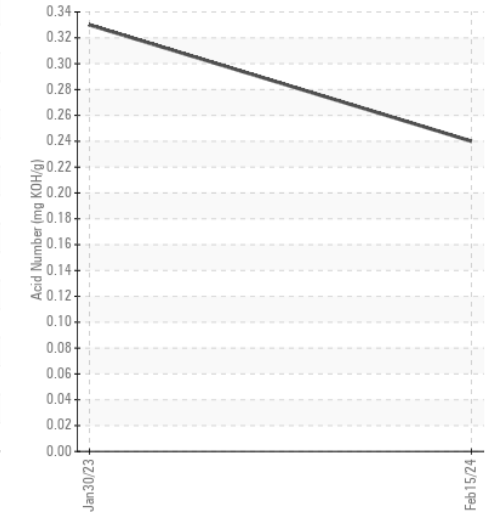
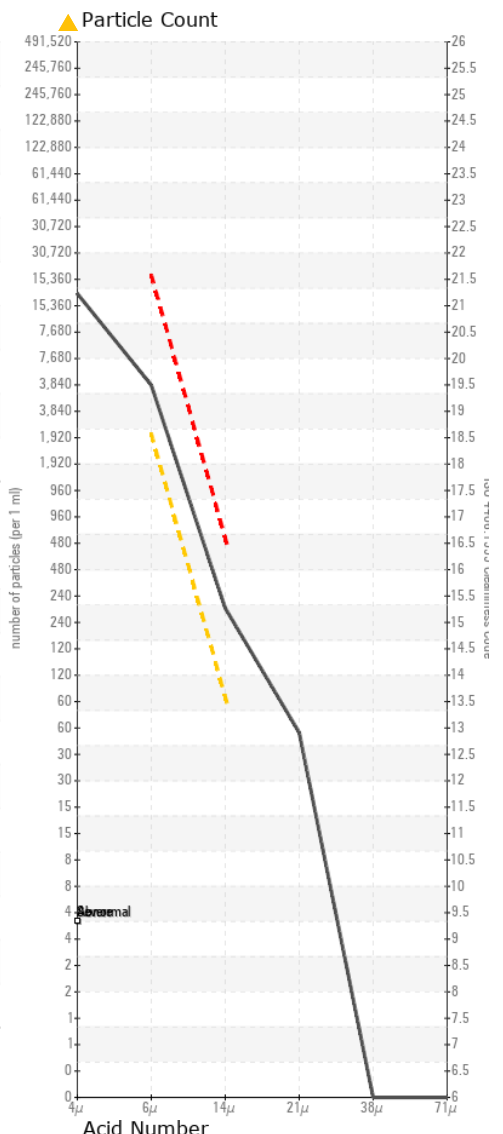
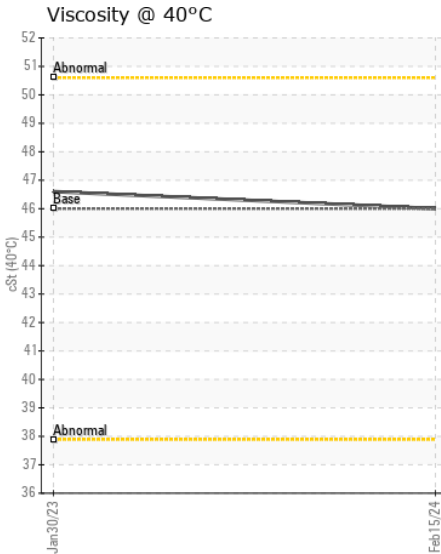
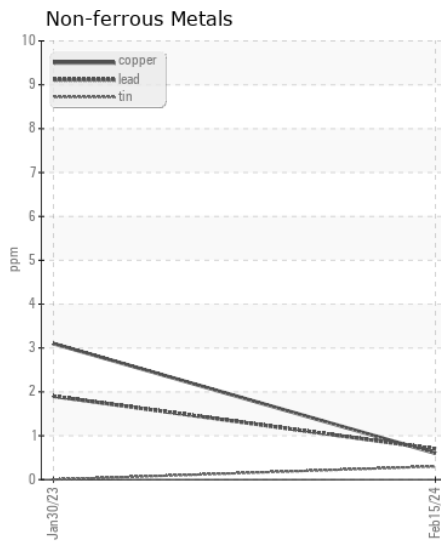
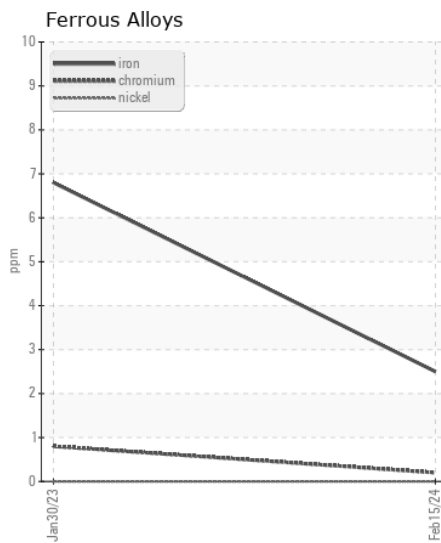
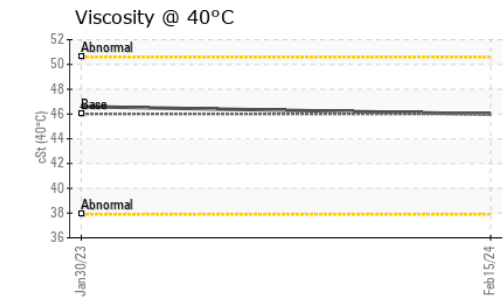
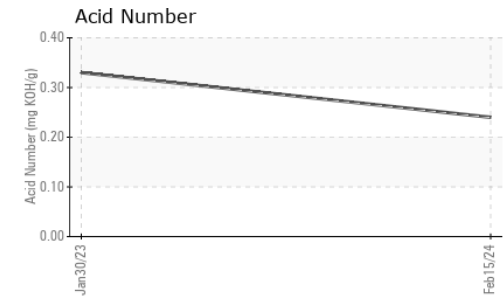
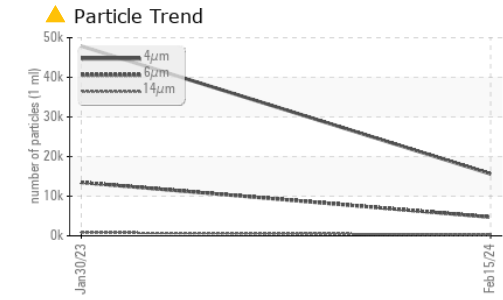
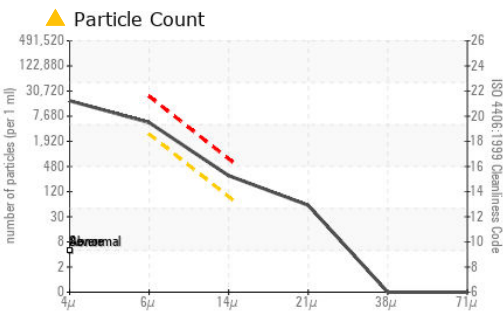
There is a moderate amount of particulates (2 to 100 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	2	4	---
Potassium	ppm	ASTM D5185m	>20	0	0	---
Water		WC Method	>0.1	NEG	NEG	---
Particles >4µm		ASTM D7647		15631	47888	---
Particles >6µm		ASTM D7647	>2500	4720	13465	---
Particles >14µm		ASTM D7647	>80	255	813	---
Particles >21µm		ASTM D7647	>20	50	126	---
Particles >38µm		ASTM D7647	>4	0	5	---
Particles >71µm		ASTM D7647	>3	0	0	---
Oil Cleanliness		ISO 4406 (c)	>-/18/13	21/19/15	23/21/17	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	LIGHT	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.1	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	2	---
Boron	ppm	ASTM D5185m	14	1	0	---
Barium	ppm	ASTM D5185m	0.0	0	0	---
Molybdenum	ppm	ASTM D5185m	0.0	0	<1	---
Manganese	ppm	ASTM D5185m	0.0	0	0	---
Magnesium	ppm	ASTM D5185m	2.6	1	<1	---
Calcium	ppm	ASTM D5185m	49	92	78	---
Phosphorus	ppm	ASTM D5185m	354	349	338	---
Zinc	ppm	ASTM D5185m	419	449	418	---
Sulfur	ppm	ASTM D5185m	3719	2090	2350	---
Acid Number (AN)	mg KOH/g	ASTM D8045		0.24	0.33	---
Visc @ 40°C	cSt	ASTM D445	46	46.0	46.6	---



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP444259 **Received** : 27 Feb 2024
Lab Number : 06102427 **Tested** : 29 Feb 2024
Unique Number : 10900657 **Diagnosed** : 29 Feb 2024 - Wes Davis
Test Package : MOB 2

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)