



VOLVO

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ATTENTION
FLUID CONDITION	ATTENTION



Area

[716513]

Machine Id

VOLVO L110H 631235

Component

Hydraulic System

Fluid

VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP439671	VCP399407	VCP359356
Sample Date		Client Info		21 May 2024	03 Jan 2023	22 Apr 2022
Machine Age	hrs	Client Info		12318	9673	8372
Oil Age	hrs	Client Info		4000	1500	4000
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Not Chngd	Changed
Filter Changed		Client Info		Changed	Not Chngd	Changed
Sample Status				ATTENTION	ABNORMAL	ATTENTION

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	7	5	2
Chromium	ppm	ASTM D5185m	>20	<1	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	2	0	1
Lead	ppm	ASTM D5185m	>20	1	1	<1
Copper	ppm	ASTM D5185m	>150	2	14	1
Tin	ppm	ASTM D5185m	>20	0	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	LIGHT	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

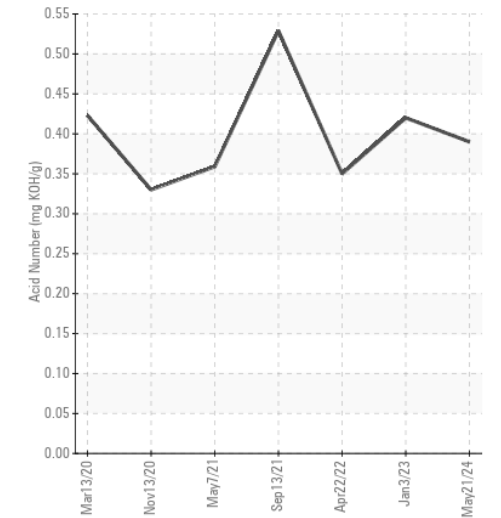
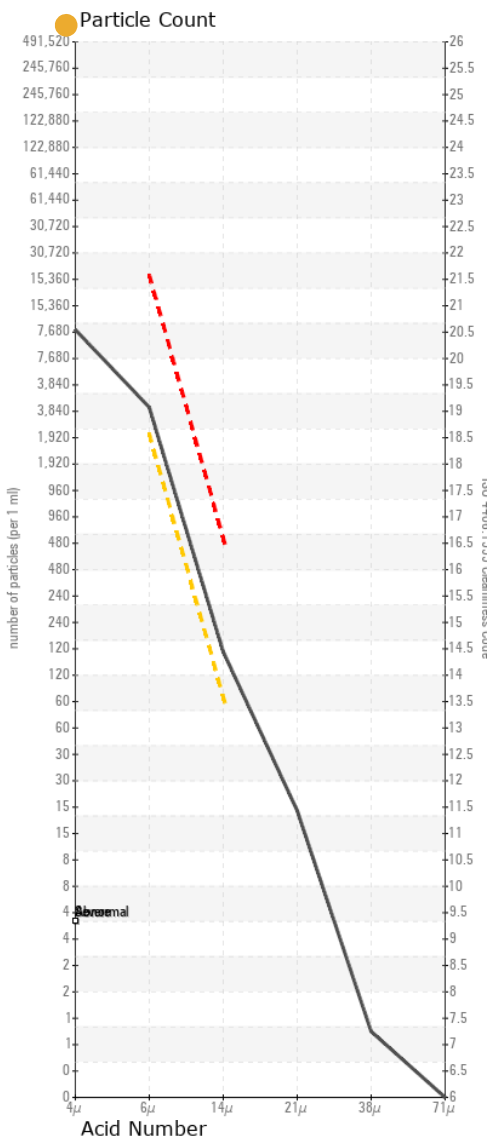
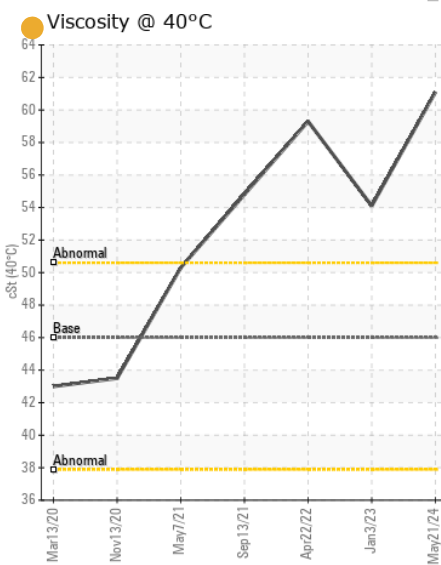
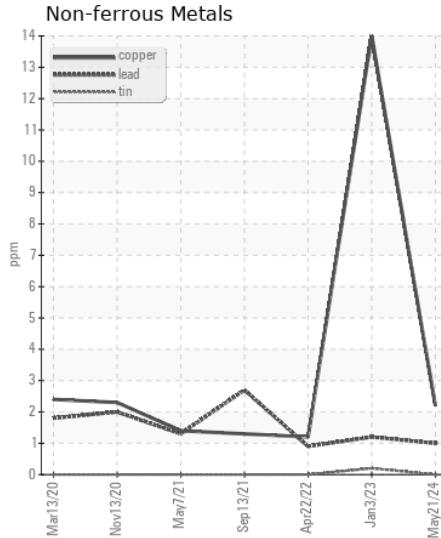
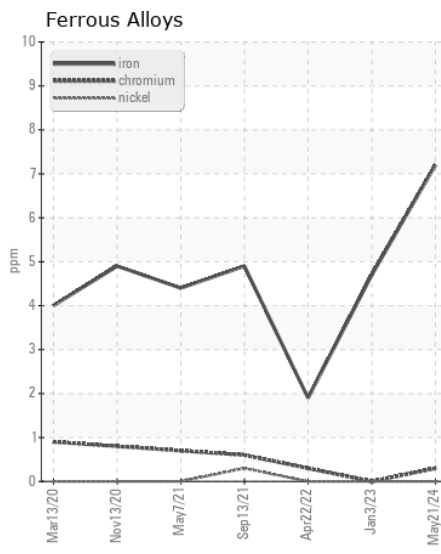
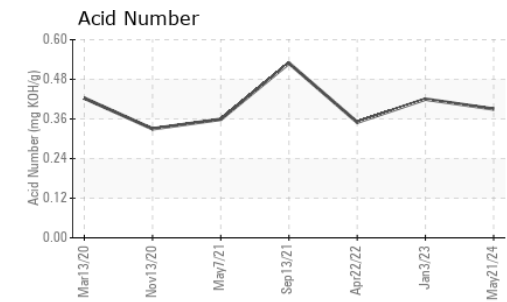
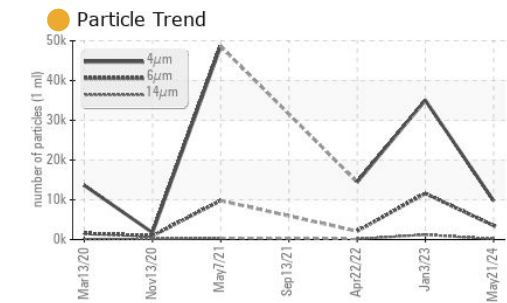
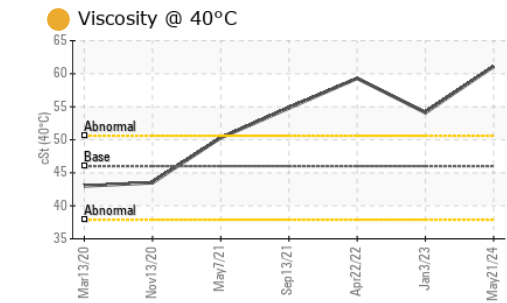
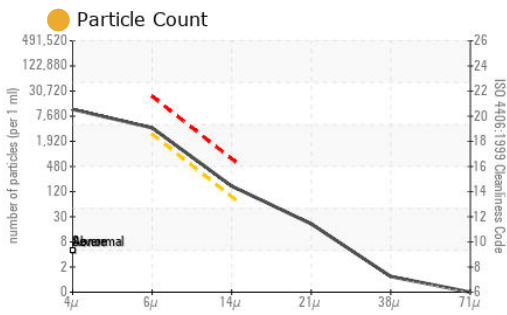
There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	4	2	2
Potassium	ppm	ASTM D5185m	>20	2	0	1
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647		9746	35022	14466
Particles >6µm		ASTM D7647	>2500	3528	11594	2120
Particles >14µm		ASTM D7647	>80	144	1225	134
Particles >21µm		ASTM D7647	>20	18	251	25
Particles >38µm		ASTM D7647	>4	1	9	2
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>-/18/13	20/19/14	22/21/17	21/18/14
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	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 oil viscosity is higher than normal. The AN level is acceptable for this fluid.

Sodium	ppm	ASTM D5185m		0	2	0
Boron	ppm	ASTM D5185m	14	4	5	4
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.0	3	7	4
Manganese	ppm	ASTM D5185m	0.0	0	<1	0
Magnesium	ppm	ASTM D5185m	2.6	9	9	7
Calcium	ppm	ASTM D5185m	49	132	1473	170
Phosphorus	ppm	ASTM D5185m	354	375	407	374
Zinc	ppm	ASTM D5185m	419	487	522	491
Sulfur	ppm	ASTM D5185m	3719	1622	3808	1292
Acid Number (AN)	mg KOH/g	ASTM D8045		0.39	0.42	0.35
Visc @ 40°C	cSt	ASTM D445	46	61.1	54.1	59.3



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP439671
Lab Number : 06214592
Unique Number : 11087456
Test Package : MOB 2
Received : 19 Jun 2024
Tested : 20 Jun 2024
Diagnosed : 21 Jun 2024 - Don Baldrige

RIPA AND ASSOCIATES
 10149 FISHER AVENUE
 TAMPA, FL
 US 33619

Contact: PM Services
 PMServices@ripaconstruction.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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