



VOLVO

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
[A12263]
Machine Id
VOLVO L110H 632378
Component
Hydraulic System
Fluid
MOBIL HYDRAULIC OIL AW 46 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP446017	VCP414300	VCP367458
Sample Date		Client Info		05 Mar 2024	31 Jul 2023	17 Jan 2023
Machine Age	hrs	Client Info		2555	1895	955
Oil Age	hrs	Client Info		2555	1895	955
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changed	Not Changed	Not Changed
Filter Changed		Client Info		Not Changed	Changed	Not Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	2	2	2
Chromium	ppm	ASTM D5185m	>20	1	<1	<1
Nickel	ppm	ASTM D5185m	>10	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	0	0	0
Lead	ppm	ASTM D5185m	>20	<1	0	<1
Copper	ppm	ASTM D5185m	>150	3	<1	2
Tin	ppm	ASTM D5185m	>20	<1	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

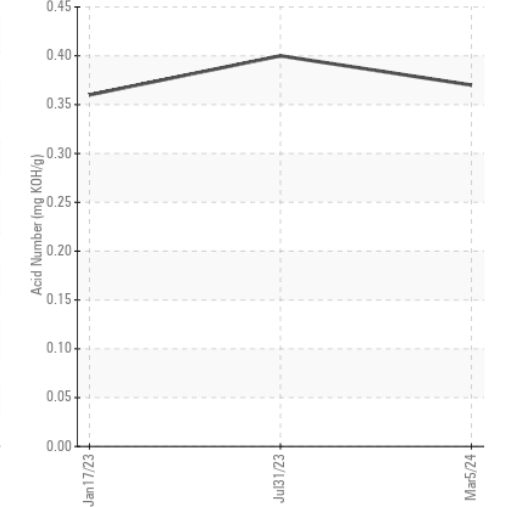
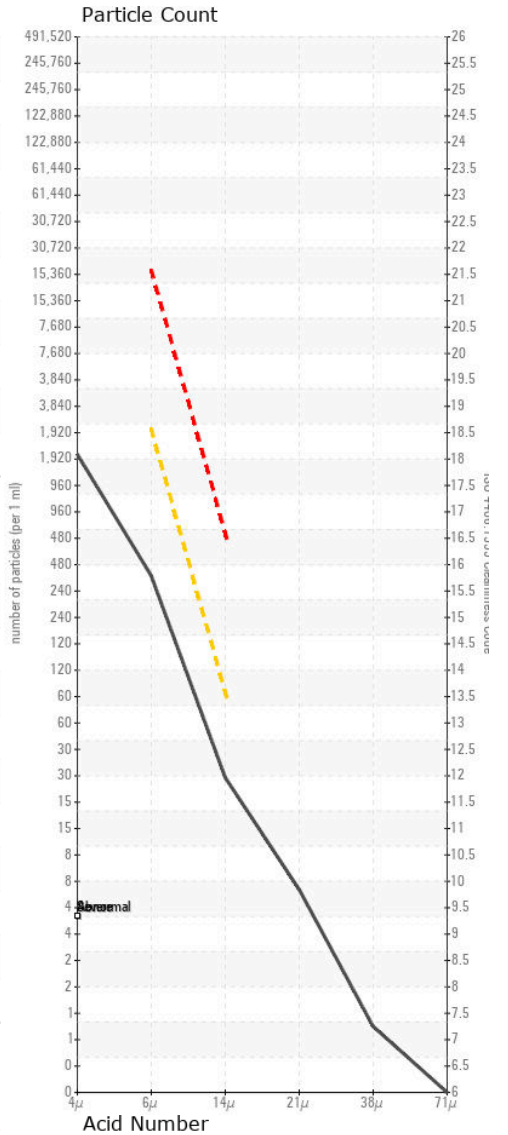
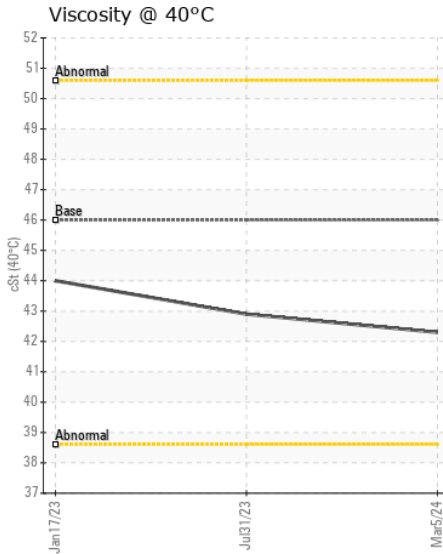
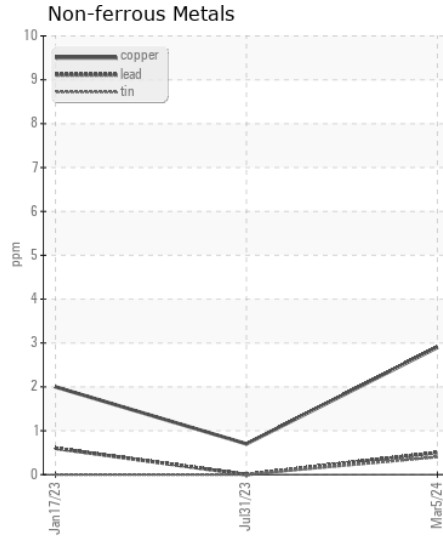
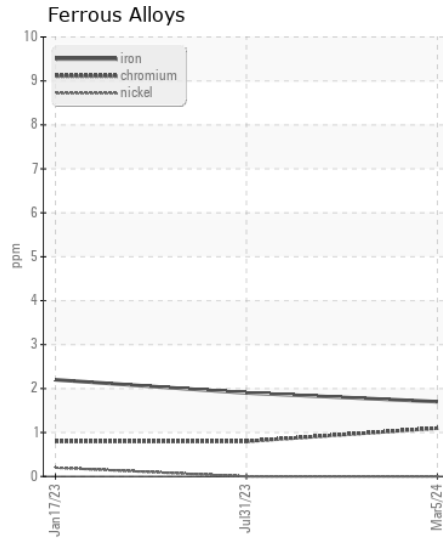
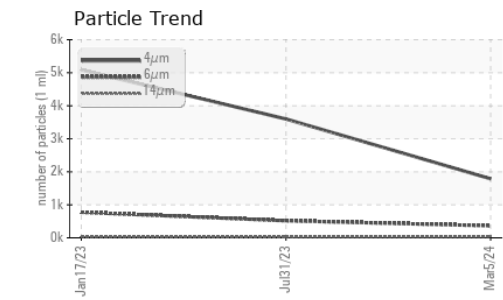
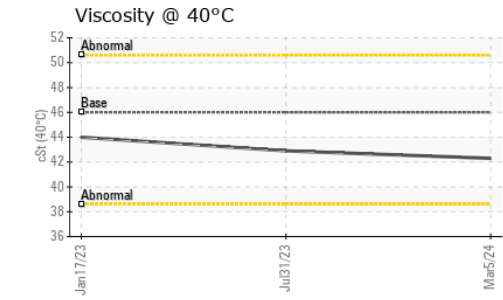
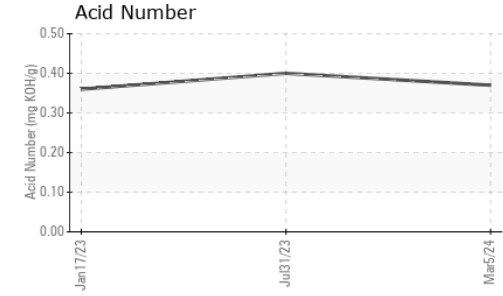
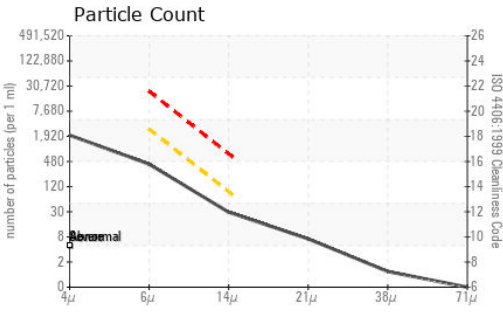
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	3	2	3
Potassium	ppm	ASTM D5185m	>20	2	0	<1
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647		1788	3599	5086
Particles >6µm		ASTM D7647	>2500	364	517	774
Particles >14µm		ASTM D7647	>80	26	21	31
Particles >21µm		ASTM D7647	>20	6	5	7
Particles >38µm		ASTM D7647	>4	1	1	1
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>-/18/13	18/16/12	19/16/12	20/17/12
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	VLITE
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	0	<1
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		1	0	2
Manganese	ppm	ASTM D5185m		<1	0	0
Magnesium	ppm	ASTM D5185m		7	6	8
Calcium	ppm	ASTM D5185m		72	69	84
Phosphorus	ppm	ASTM D5185m		350	352	377
Zinc	ppm	ASTM D5185m		444	440	466
Sulfur	ppm	ASTM D5185m		2395	2399	2348
Acid Number (AN)	mg KOH/g	ASTM D8045		0.37	0.40	0.36
Visc @ 40°C	cSt	ASTM D445	46	42.3	42.9	44.0



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP446017
Lab Number : 06123571
Unique Number : 10937722
Test Package : MOB 2

Received : 20 Mar 2024
Tested : 24 Mar 2024
Diagnosed : 24 Mar 2024 - Wes Davis

HMR ASSOCIATES
 PO BOX 485
 TOUGHKENAMON, PA
 US 19374
 Contact: SERVICE MANAGER

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)

T:
 F: (610)268-2225