



VOLVO

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
[A12797]
 Machine Id
VOLVO L110H 632014
 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		VCP439532	VCP404463	VCP365703
Sample Date		Client Info		05 Jun 2024	04 Apr 2023	07 Nov 2022
Machine Age	hrs	Client Info		7800	6860	5460
Oil Age	hrs	Client Info		2000	2000	1000
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Chngd	Not Chngd	Not Chngd
Filter Changed		Client Info		Not Chngd	Changed	Not Chngd
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	16	15	9
Chromium	ppm	ASTM D5185m	>20	4	4	2
Nickel	ppm	ASTM D5185m	>10	<1	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	<1	0	0
Lead	ppm	ASTM D5185m	>20	1	1	2
Copper	ppm	ASTM D5185m	>150	2	3	2
Tin	ppm	ASTM D5185m	>20	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

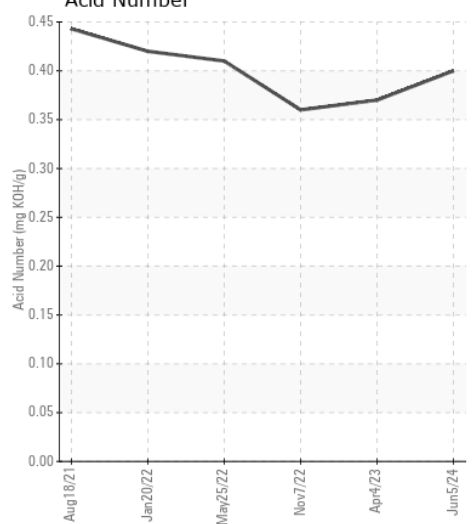
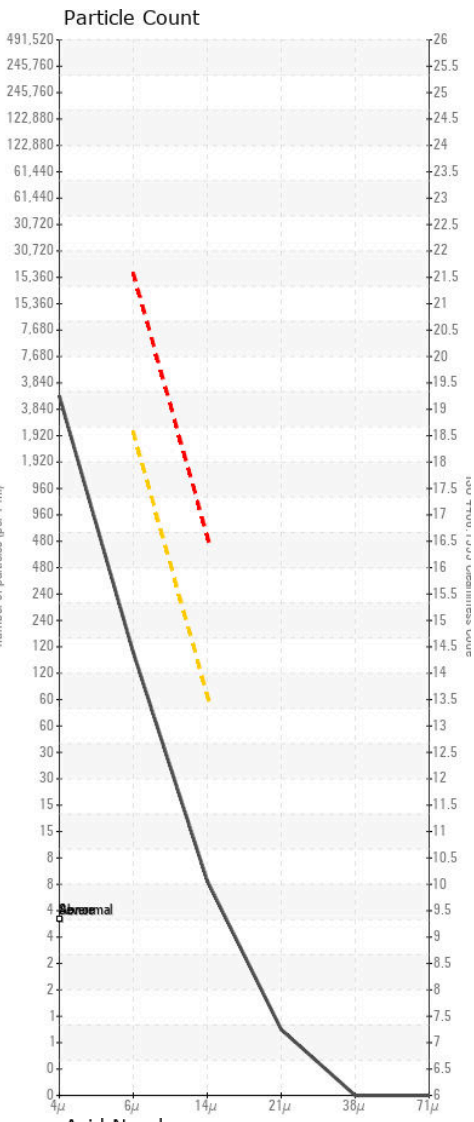
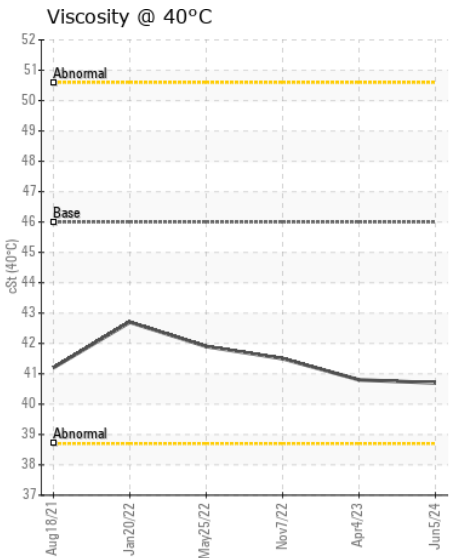
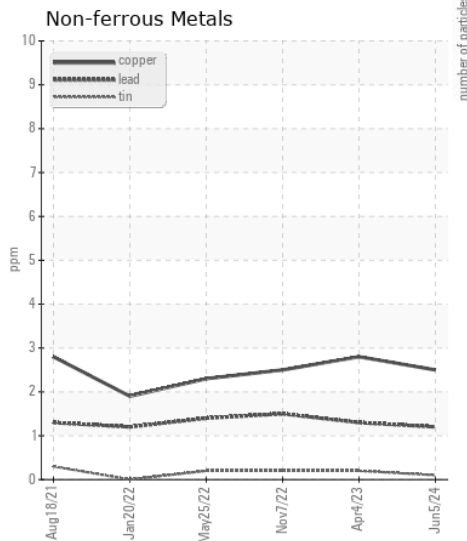
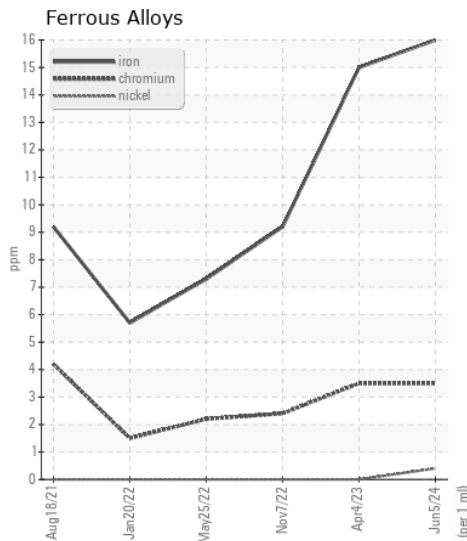
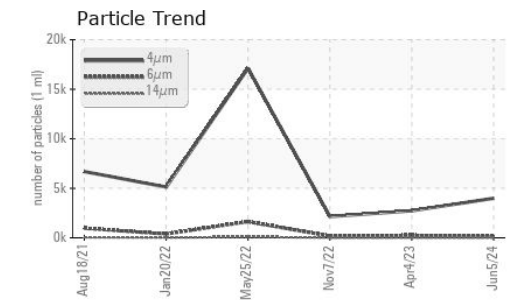
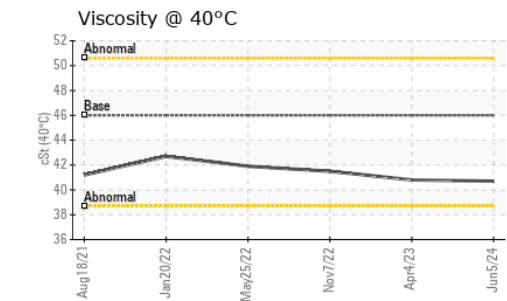
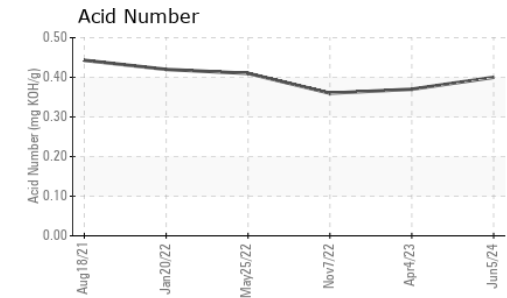
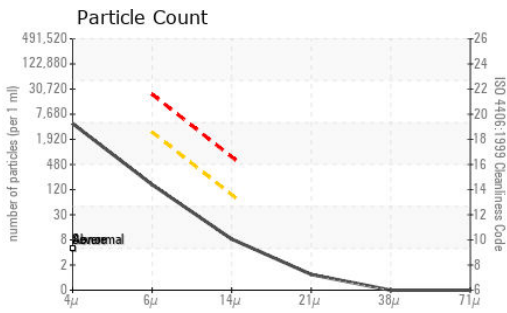
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	4	4	2
Potassium	ppm	ASTM D5185m	>20	6	2	3
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647		3994	2731	2146
Particles >6µm		ASTM D7647	>2500	139	243	180
Particles >14µm		ASTM D7647	>80	7	15	10
Particles >21µm		ASTM D7647	>20	1	3	2
Particles >38µm		ASTM D7647	>4	0	0	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>-/18/13	19/14/10	19/15/11	18/15/10
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		7	1	0
Boron	ppm	ASTM D5185m		0	0	<1
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	<1	<1
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m		7	5	4
Calcium	ppm	ASTM D5185m		80	76	68
Phosphorus	ppm	ASTM D5185m		360	328	334
Zinc	ppm	ASTM D5185m		454	440	444
Sulfur	ppm	ASTM D5185m		2606	2165	2618
Acid Number (AN)	mg KOH/g	ASTM D8045		0.40	0.37	0.36
Visc @ 40°C	cSt	ASTM D445	46	40.7	40.8	41.5



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP439532
Lab Number : 06215736
Unique Number : 11088600
Test Package : MOB 2

Received : 20 Jun 2024
Tested : 21 Jun 2024
Diagnosed : 21 Jun 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