



# VOLVO

## OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ATTENTION
FLUID CONDITION	NORMAL



Area  
**[A12267]**  
Machine Id  
**VOLVO L110H 632441**  
Component  
**Hydraulic System**  
Fluid  
**MOBIL HYDRAULIC OIL AW 46 (--- GAL)**

### RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP446076	VCP412930	VCP409803
Sample Date		Client Info		05 Mar 2024	02 Oct 2023	05 Apr 2023
Machine Age	hrs	Client Info		3590	2450	1280
Oil Age	hrs	Client Info		3590	2450	1280
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Changed	Not Changd
Sample Status				ATTENTION	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	5	5	3
Chromium	ppm	ASTM D5185m	>20	2	<1	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	0	0	0
Lead	ppm	ASTM D5185m	>20	<1	0	<1
Copper	ppm	ASTM D5185m	>150	2	2	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

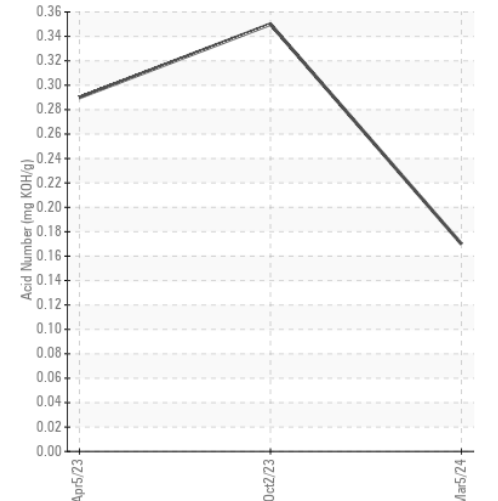
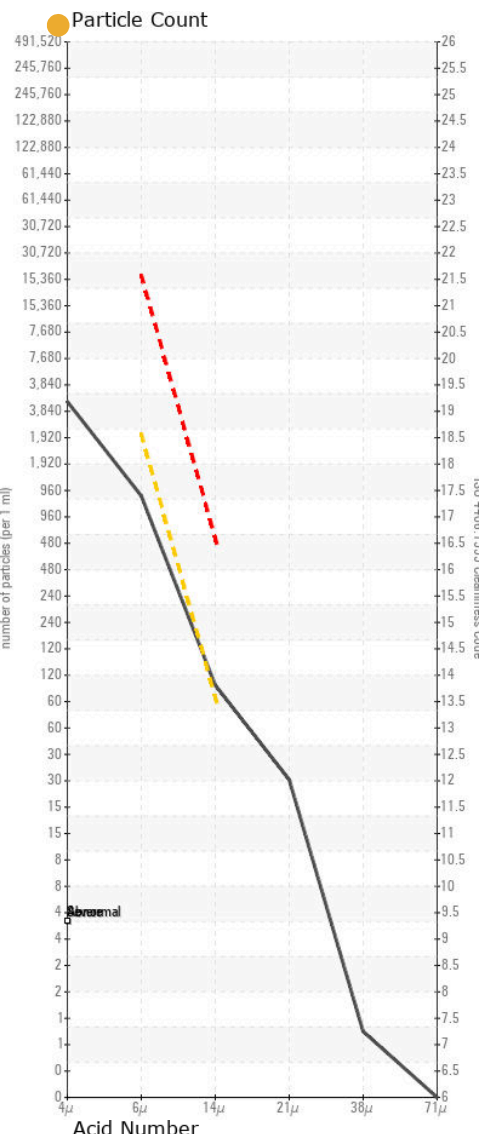
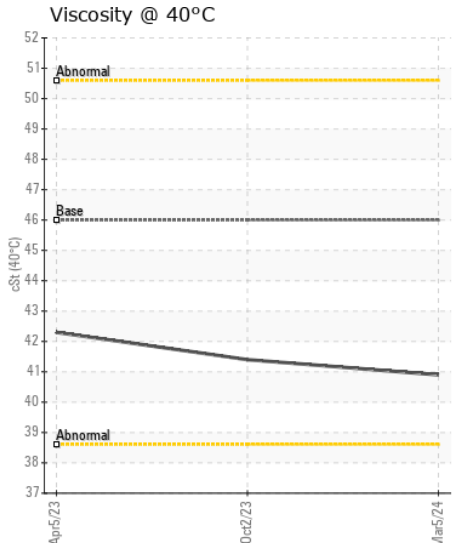
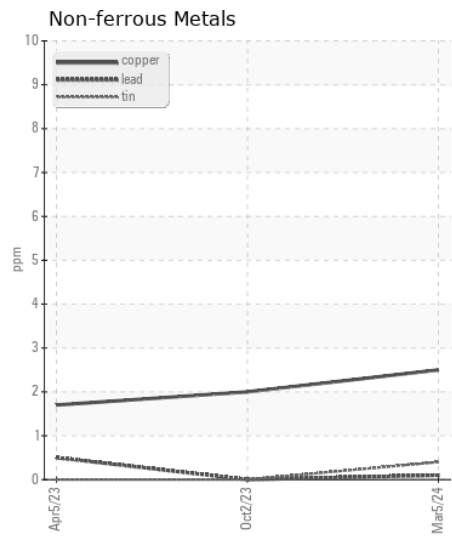
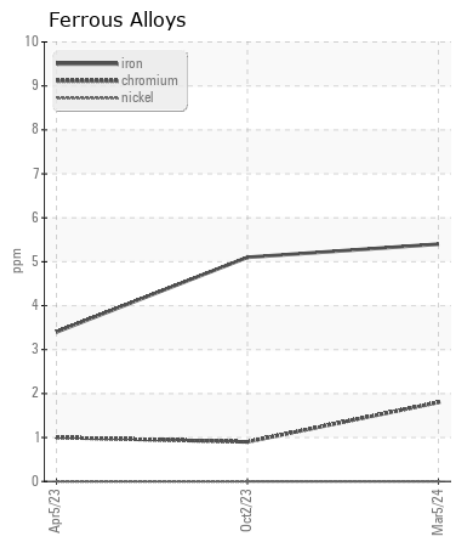
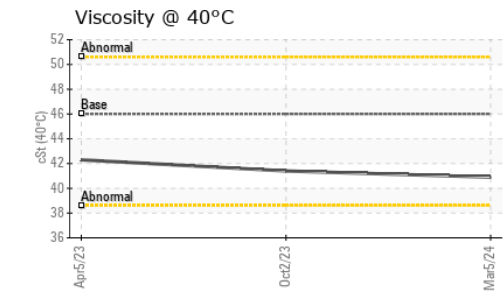
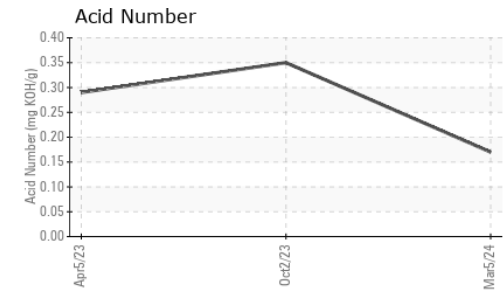
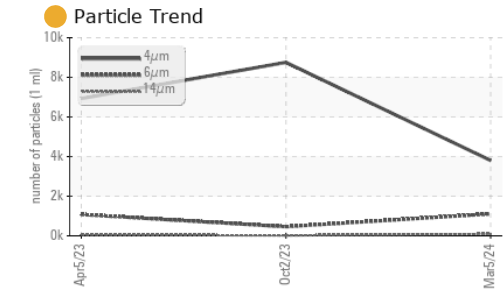
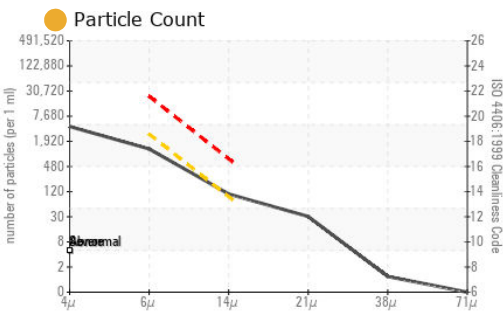
There is a light amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	3	3	3
Potassium	ppm	ASTM D5185m	>20	4	3	2
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647		3804	8754	6930
Particles >6µm		ASTM D7647	>2500	1107	460	1076
Particles >14µm		ASTM D7647	>80	93	19	50
Particles >21µm		ASTM D7647	>20	27	6	8
Particles >38µm		ASTM D7647	>4	1	0	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>-/18/13	19/17/14	20/16/11	20/17/13
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT	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		2	1	0
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		<1	<1	<1
Manganese	ppm	ASTM D5185m		<1	0	0
Magnesium	ppm	ASTM D5185m		5	4	5
Calcium	ppm	ASTM D5185m		73	79	66
Phosphorus	ppm	ASTM D5185m		328	341	318
Zinc	ppm	ASTM D5185m		414	431	430
Sulfur	ppm	ASTM D5185m		2423	2139	2064
Acid Number (AN)	mg KOH/g	ASTM D8045		0.17	0.35	0.29
Visc @ 40°C	cSt	ASTM D445	46	40.9	41.4	42.3



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : VCP446076  
**Lab Number** : 06123568  
**Unique Number** : 10937719  
**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)