



VOLVO

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
[A12261]
Machine Id
VOLVO L110H 632554
Component
Diesel Engine
Fluid
MOBIL 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP407251	VCP432250	VCP425919
Sample Date		Client Info		16 Mar 2024	20 Dec 2023	06 Oct 2023
Machine Age	hrs	Client Info		2725	2100	1475
Oil Age	hrs	Client Info		500	500	500
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	11	11	25
Chromium	ppm	ASTM D5185m	>10	<1	<1	1
Nickel	ppm	ASTM D5185m	>10	<1	0	<1
Titanium	ppm	ASTM D5185m		1	<1	<1
Silver	ppm	ASTM D5185m	>2	0	<1	<1
Aluminum	ppm	ASTM D5185m	>10	4	4	5
Lead	ppm	ASTM D5185m	>20	<1	0	<1
Copper	ppm	ASTM D5185m	>15	2	5	▲ 24
Tin	ppm	ASTM D5185m	>10	1	1	2
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

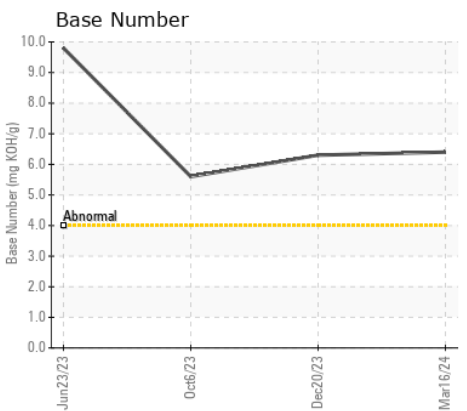
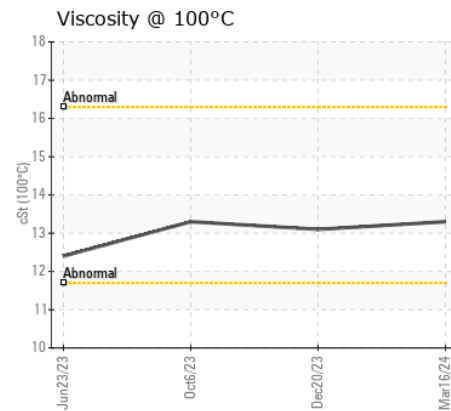
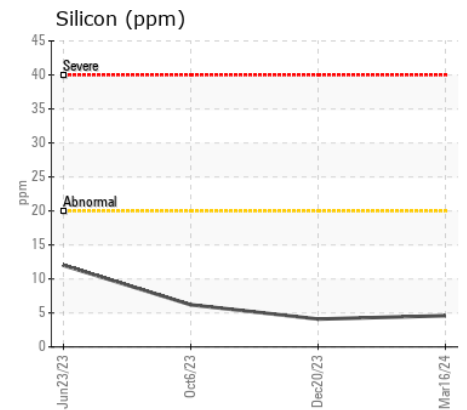
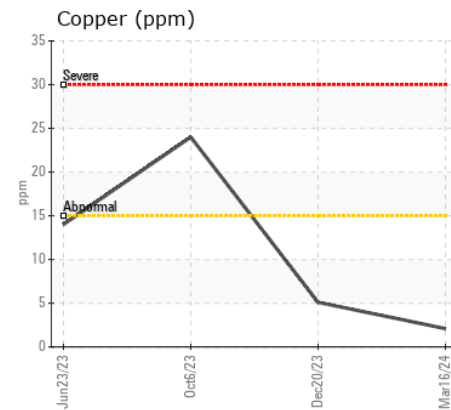
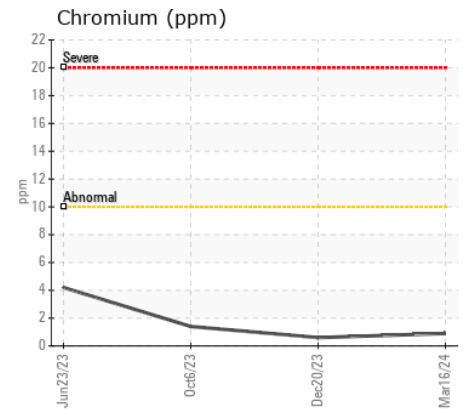
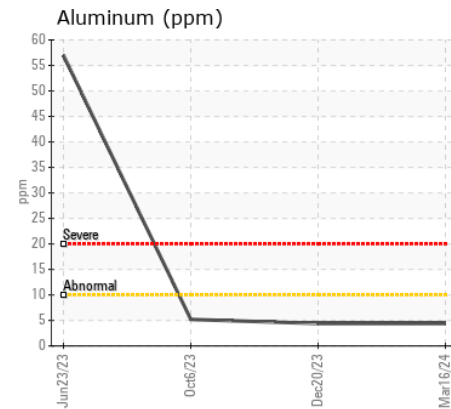
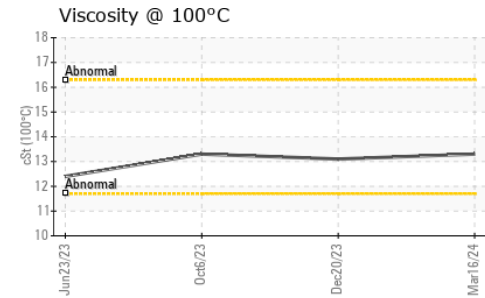
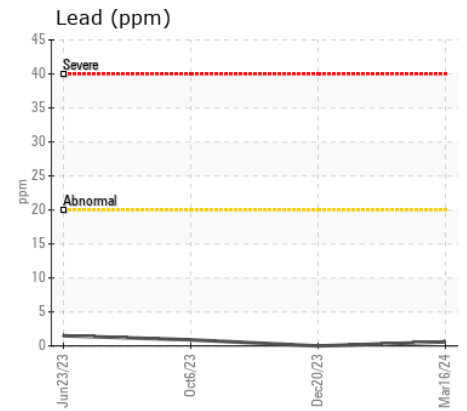
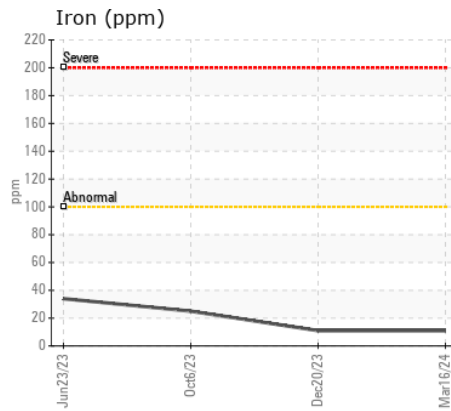
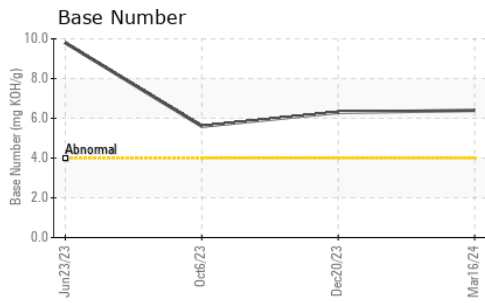
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	5	4	6
Potassium	ppm	ASTM D5185m	>20	2	1	2
Fuel		WC Method	>6.0	<1.0	<1.0	<1.0
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.3	0.3	0.5
Nitration	Abs/cm	*ASTM D7624	>20	7.4	6.9	7.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.5	18.5	19.6
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 BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>118	2	1	<1
Boron	ppm	ASTM D5185m		5	6	5
Barium	ppm	ASTM D5185m		0	0	3
Molybdenum	ppm	ASTM D5185m		8	13	23
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		90	178	272
Calcium	ppm	ASTM D5185m		2181	2033	1824
Phosphorus	ppm	ASTM D5185m		895	917	847
Zinc	ppm	ASTM D5185m		1078	1098	1050
Sulfur	ppm	ASTM D5185m		3880	3485	3473
Oxidation	Abs/.1mm	*ASTM D7414	>25	11.4	11.7	13.8
Base Number (BN)	mg KOH/g	ASTM D2896		6.4	6.3	5.6
Visc @ 100°C	cSt	ASTM D445		13.3	13.1	13.3



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : VCP407251

Lab Number : 06123429

Unique Number : 10937580

Test Package : MOB 1 (Additional Tests: TBN)

Received : 20 Mar 2024

Tested : 21 Mar 2024

Diagnosed : 21 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