



McCLUNG-LOGAN
EQUIPMENT COMPANY, INC.

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
VOLVO L90H 626708
Component
Diesel Engine
Fluid
MOBIL 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. (Customer Sample Comment: 500 hour service)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ML0886316	VCP416132	VCP390513
Sample Date		Client Info		16 Jan 2024	25 Sep 2023	05 Jun 2023
Machine Age	hrs	Client Info		1581	1036	480
Oil Age	hrs	Client Info		500	500	500
Filter Age	hrs	Client Info		500	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	8	9	15
Chromium	ppm	ASTM D5185m	>20	<1	<1	1
Nickel	ppm	ASTM D5185m	>5	0	0	0
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>30	3	<1	2
Lead	ppm	ASTM D5185m	>40	0	<1	1
Copper	ppm	ASTM D5185m	>20	1	2	10
Tin	ppm	ASTM D5185m	>20	0	1	2
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

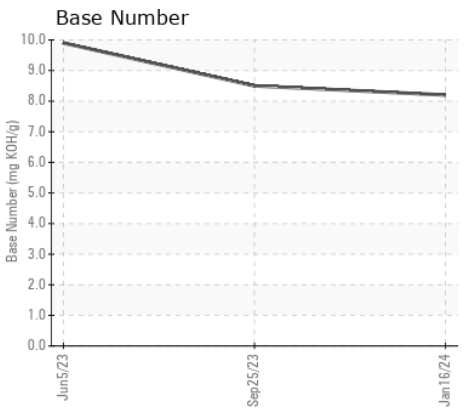
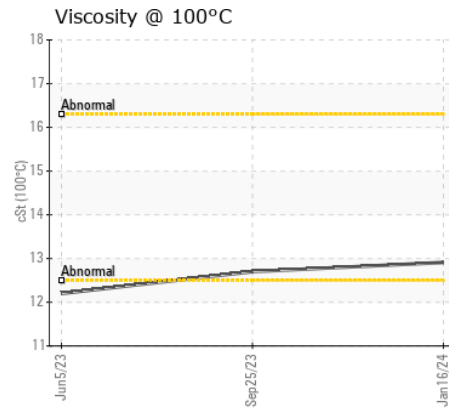
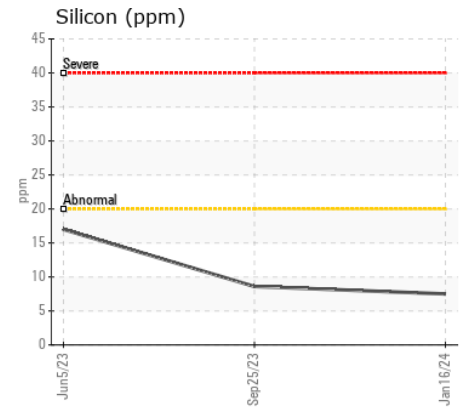
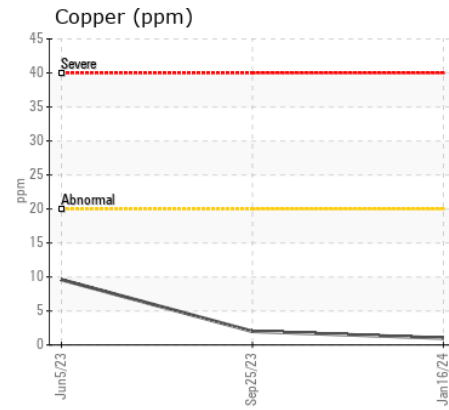
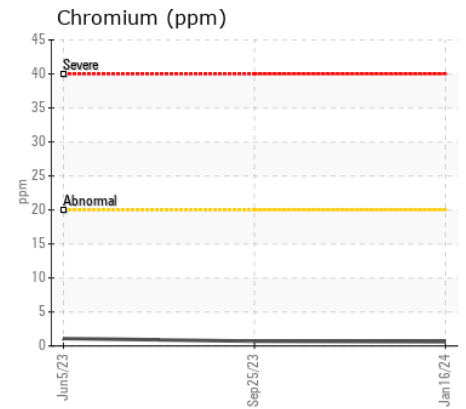
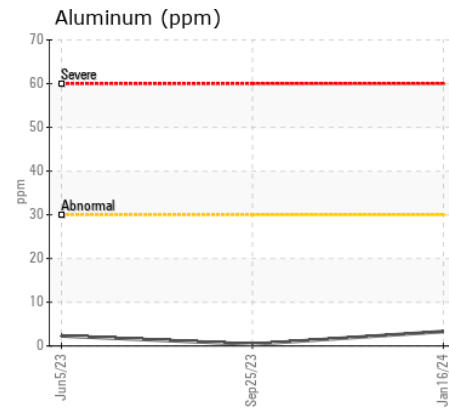
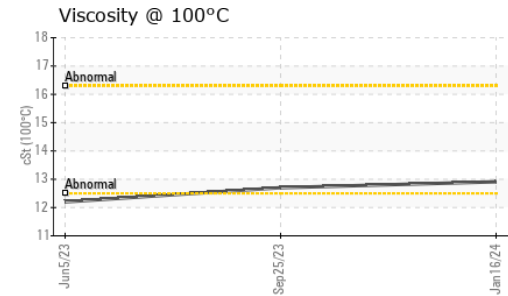
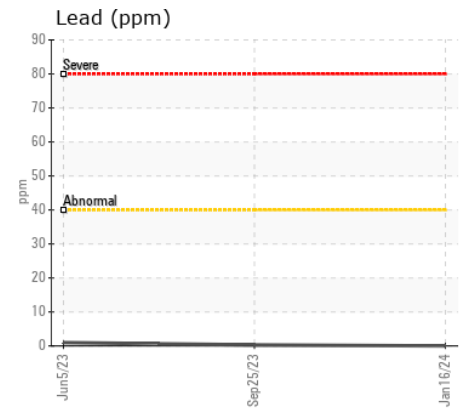
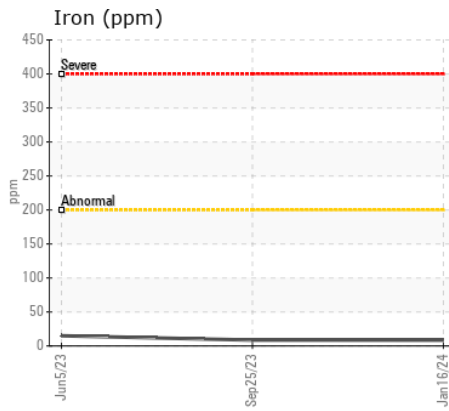
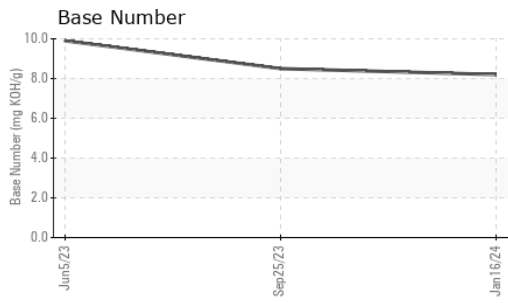
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	8	9	17
Potassium	ppm	ASTM D5185m	>20	1	0	0
Fuel		WC Method	>6.0	<1.0	<1.0	0.6
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.2	0.2	0.1
Nitration	Abs/cm	*ASTM D7624	>20	7.2	7.2	6.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.7	22.0	21.8
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	>0.2	NEG	NEG	NEG

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m	>118	2	2	4
Boron	ppm	ASTM D5185m		299	273	55
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		125	123	46
Manganese	ppm	ASTM D5185m		<1	1	4
Magnesium	ppm	ASTM D5185m		677	669	584
Calcium	ppm	ASTM D5185m		1593	1612	1638
Phosphorus	ppm	ASTM D5185m		797	776	913
Zinc	ppm	ASTM D5185m		916	954	1109
Sulfur	ppm	ASTM D5185m		2841	2766	3858
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.6	16.5	18.7
Base Number (BN)	mg KOH/g	ASTM D2896		8.2	8.5	9.9
Visc @ 100°C	cSt	ASTM D445		12.91	12.7	12.2



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ML0886316 **Received** : 17 Jan 2024
Lab Number : 06063457 **Diagnosed** : 24 Jan 2024
Unique Number : 10834839 **Diagnostician** : Doug Bogart
Test Package : MOBCE (Additional Tests: TBN)

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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)