



McCLUNG-LOGAN
EQUIPMENT COMPANY, INC.

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
VOLVO L120H 633107
Component
1 Diesel Engine
Fluid
VOLVO VDS-4.5 Premium Motor Oil 15W40 (6 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ML0001822	ML0001541	ML0000676
Sample Date		Client Info		13 Jun 2024	04 May 2024	04 Mar 2024
Machine Age	hrs	Client Info		8683	8159	7361
Oil Age	hrs	Client Info		524	798	7361
Filter Age	hrs	Client Info		0	798	7361
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	10	17	9
Chromium	ppm	ASTM D5185m	>10	<1	1	0
Nickel	ppm	ASTM D5185m	>10	0	<1	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>10	4	▲ 11	5
Lead	ppm	ASTM D5185m	>20	0	2	<1
Copper	ppm	ASTM D5185m	>15	<1	1	2
Tin	ppm	ASTM D5185m	>10	0	1	1
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

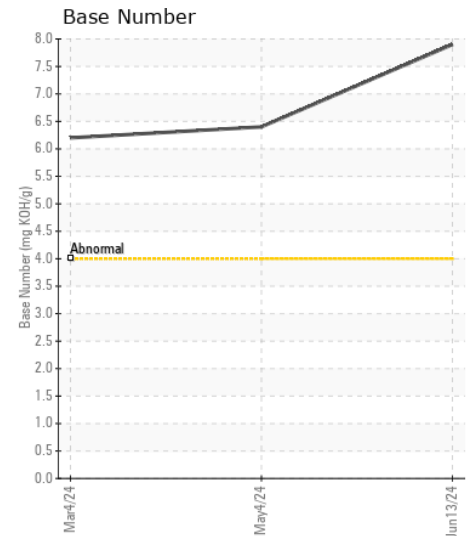
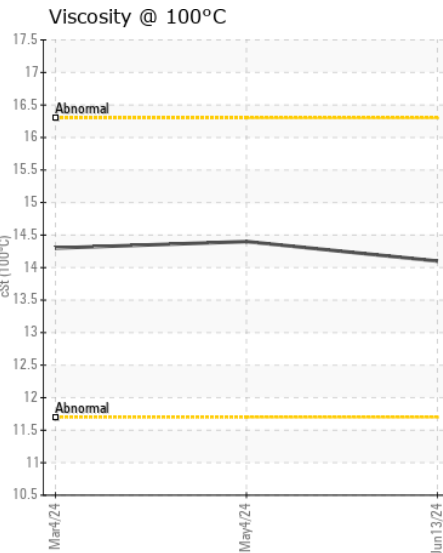
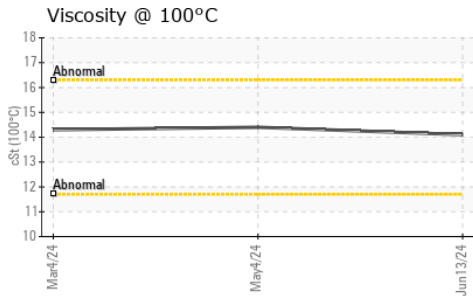
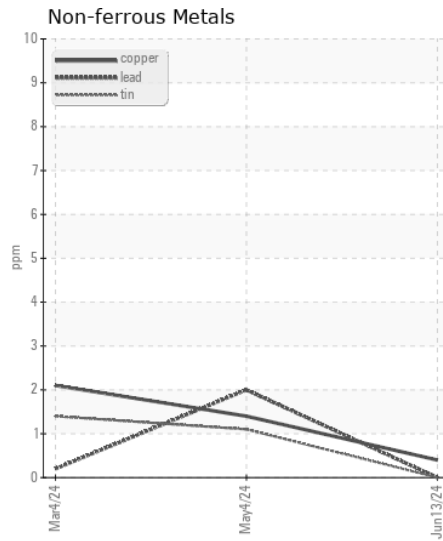
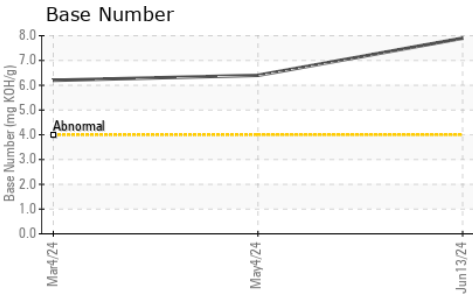
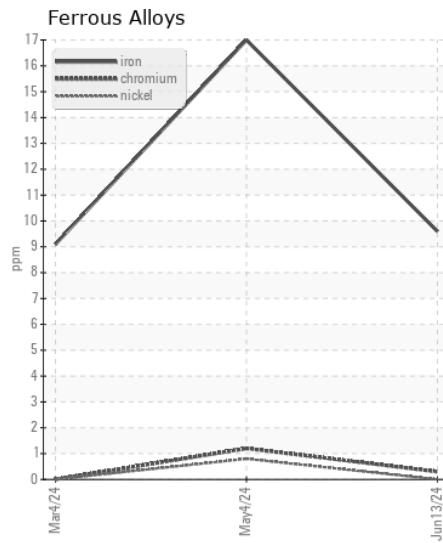
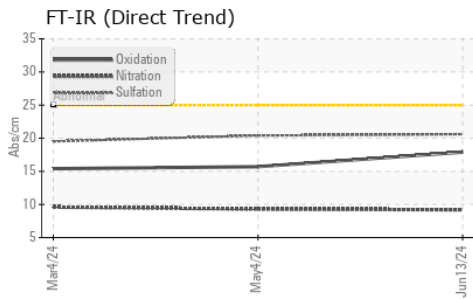
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	7	12	5
Potassium	ppm	ASTM D5185m	>20	1	1	0
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	0.6	0.6	0.5
Nitration	Abs/cm	*ASTM D7624	>20	9.2	9.3	9.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.6	20.4	19.5
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		2	4	<1
Boron	ppm	ASTM D5185m		22	60	35
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		57	123	83
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m		628	166	149
Calcium	ppm	ASTM D5185m		1409	2991	2352
Phosphorus	ppm	ASTM D5185m		823	1426	1026
Zinc	ppm	ASTM D5185m		1079	1777	1264
Sulfur	ppm	ASTM D5185m		2898	5532	3862
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.9	15.7	15.4
Base Number (BN)	mg KOH/g	ASTM D2896		7.9	6.4	6.2
Visc @ 100°C	cSt	ASTM D445		14.1	14.4	14.3



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ML0001822 **Received** : 14 Jun 2024
Lab Number : 06211048 **Tested** : 18 Jun 2024
Unique Number : 11083912 **Diagnosed** : 18 Jun 2024 - Angela Borella
Test Package : CONST (Additional Tests: TBN)

MCCLUNG-LOGAN EQUIPMENT CO - RICHMOND
 1345 MOUNTAIN ROAD
 GLEN ALLEN, VA
 US 23060
 Contact: Christopher King
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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)

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