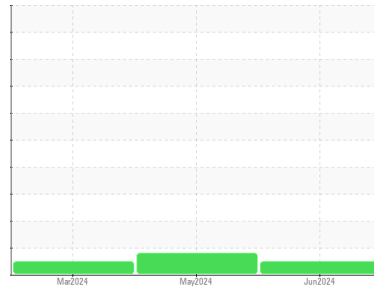




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



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

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

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.

SAMPLE INFORMATION

	method	limit/base	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
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			NORMAL	ABNORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
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

WEAR METALS

	method	limit/base	current	history1	history2
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
Cadmium	ppm	ASTM D5185m	0	<1	0

ADDITIVES

	method	limit/base	current	history1	history2
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

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	7	12	5
Sodium	ppm	ASTM D5185m	2	4	<1
Potassium	ppm	ASTM D5185m >20	1	1	0

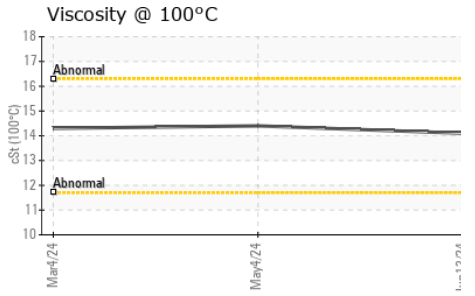
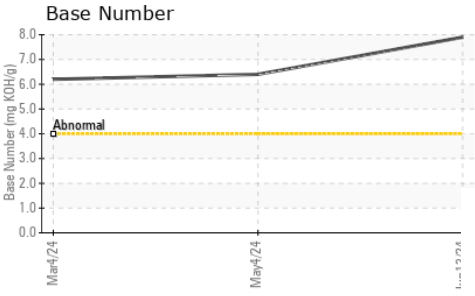
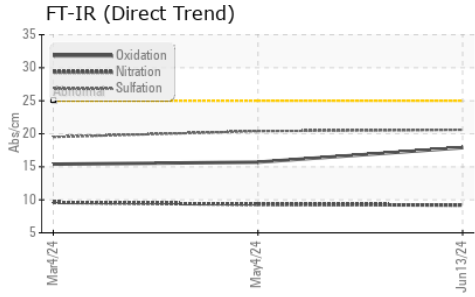
INFRA-RED

	method	limit/base	current	history1	history2
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

FLUID DEGRADATION

	method	limit/base	current	history1	history2
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

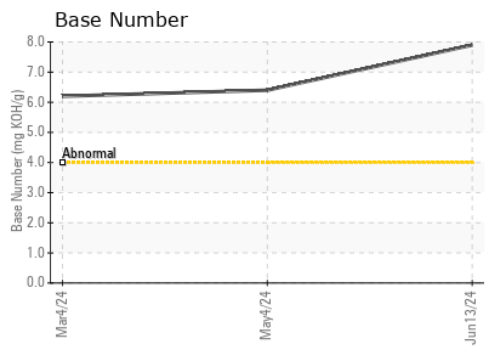
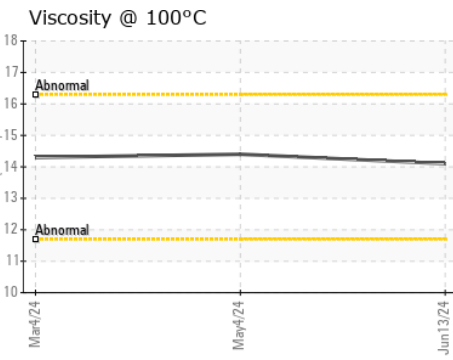
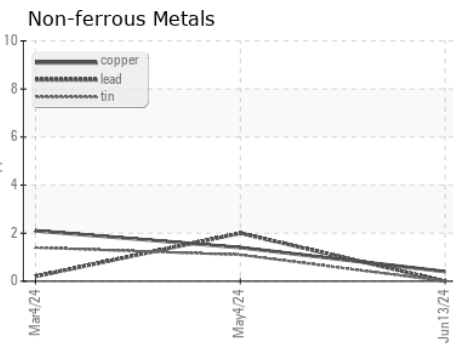
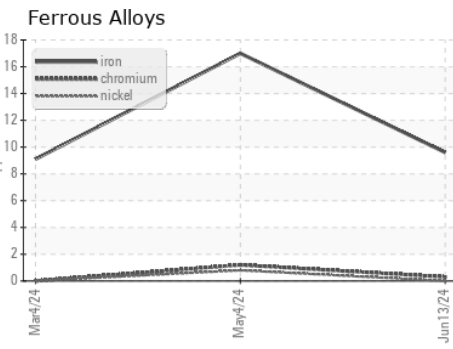
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.1	14.4	14.3

GRAPHS



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
 cking@mcclung-logan.com

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)