



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area

[6501]

Machine Id

VOLVO L90H 627175

Component

Diesel Engine

Fluid

VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ML0000233	VCP392650	---
Sample Date		Client Info		24 Jun 2024	04 Jan 2024	---
Machine Age	hrs	Client Info		1572	672	---
Oil Age	hrs	Client Info		588	672	---
Filter Age	hrs	Client Info		588	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	8	26	---
Chromium	ppm	ASTM D5185m	>10	<1	2	---
Nickel	ppm	ASTM D5185m	>10	0	<1	---
Titanium	ppm	ASTM D5185m		0	<1	---
Silver	ppm	ASTM D5185m	>2	0	0	---
Aluminum	ppm	ASTM D5185m	>10	4	12	---
Lead	ppm	ASTM D5185m	>20	0	2	---
Copper	ppm	ASTM D5185m	>15	2	8	---
Tin	ppm	ASTM D5185m	>10	<1	3	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

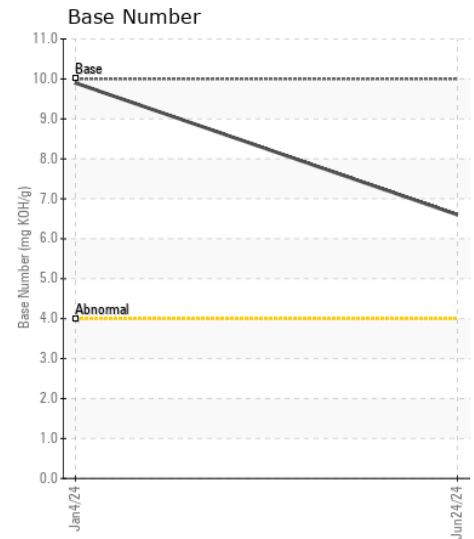
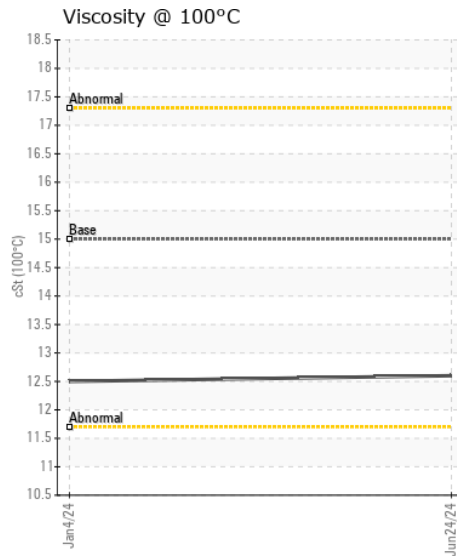
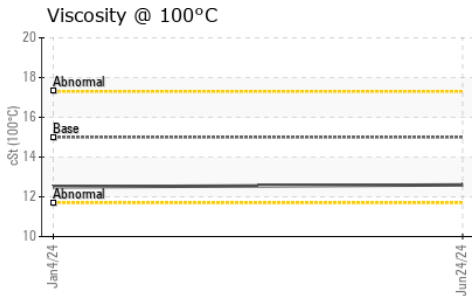
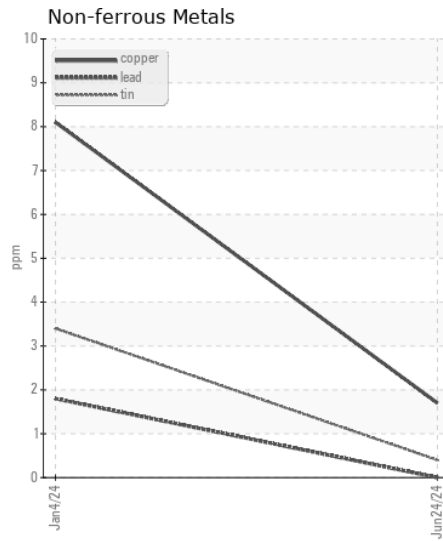
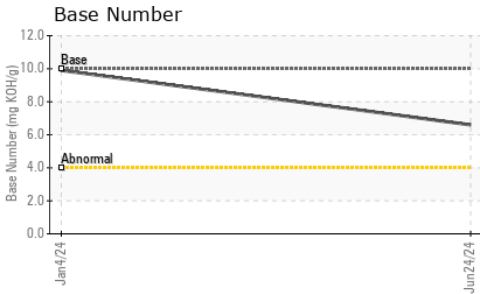
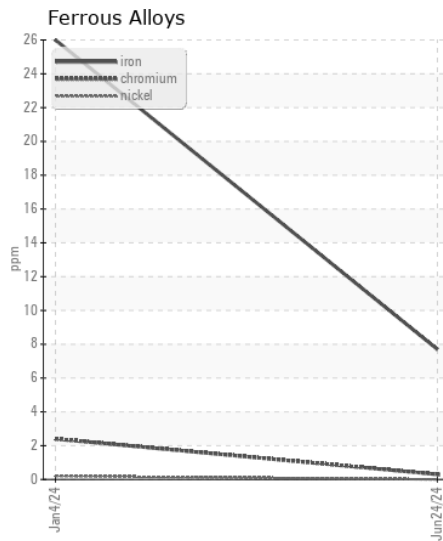
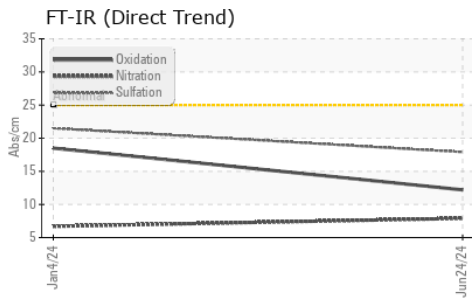
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	6	19	---
Potassium	ppm	ASTM D5185m	>20	3	<1	---
Fuel		WC Method	>6.0	<1.0	<1.0	---
Water		WC Method	>0.1	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.3	0.3	---
Nitration	Abs/cm	*ASTM D7624	>20	7.9	6.7	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.9	21.5	---
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	---

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		1	4	---
Boron	ppm	ASTM D5185m	2.5	51	47	---
Barium	ppm	ASTM D5185m	0.0	2	3	---
Molybdenum	ppm	ASTM D5185m	0.7	70	38	---
Manganese	ppm	ASTM D5185m	0.0	<1	5	---
Magnesium	ppm	ASTM D5185m	256	337	655	---
Calcium	ppm	ASTM D5185m	2057	1790	1630	---
Phosphorus	ppm	ASTM D5185m	935	991	1113	---
Zinc	ppm	ASTM D5185m	1223	1172	1296	---
Sulfur	ppm	ASTM D5185m	4079	3982	3788	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	12.2	18.5	---
Base Number (BN)	mg KOH/g	ASTM D2896	10	6.6	9.9	---
Visc @ 100°C	cSt	ASTM D445	15.0	12.6	12.5	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ML0000233 **Received** : 25 Jun 2024
Lab Number : 06220481 **Tested** : 26 Jun 2024
Unique Number : 11098678 **Diagnosed** : 27 Jun 2024 - Don Baldrige
Test Package : CONST (Additional Tests: TBN)

MCCLUNG-LOGAN EQUIPMENT CO - SALEM
 2025 COOK DRIVE
 SALEM, VA
 US 24153

Contact: HUNTER TRIVELLIN
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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)

T: (540)553-1171

F: