

Area

[685] VOLVO L150H 7148 Component Diesel Engine

MOBIL 15W40 (--- GAL)

RECOMMENDATION

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		VCP413040		
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.	Sample Date		Client Info		02 Feb 2024		
	Machine Age	hrs	Client Info		1111		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				ABNORMAL		
				400	•		
WEAR	Iron	ppm	ASTM D5185m		3		
The copper level is abnormal. In the absence of other significant wear metals, suspect copper due to sources other than wear (i.e. cooling core). All other component wear rates are normal.	Chromium	ppm	ASTM D5185m		<1		
	Nickel	ppm	ASTM D5185m	>10	0		
	Titanium	ppm	ASTM D5185m	0	<1		
	Silver	ppm	ASTM D5185m		0		
	Aluminum	ppm	ASTM D5185m		1		
	Lead	ppm	ASTM D5185m		0		
	Copper	ppm	ASTM D5185m		<u> </u>		
	Tin	ppm	ASTM D5185m	>10	0		
	Vanadium White Metal	ppm	ASTM D5185m *Visual		-		
		scalar		NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>20	5		
Fuel content negligible. There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	2		
	Fuel	%	ASTM D3524	>6.0	0.6		
	Water		WC Method	>0.1	NEG		
	Glycol	%	*ASTM D2982		NEG		
	Soot %	%	*ASTM D7844	>3	0.1		
	Nitration	Abs/cm	*ASTM D7624	>20	6.3		
	Sulfation	Abs/.1mm	*ASTM D7415	>30	22.3		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Appearance	scalar	*Visual	NORML	NORML		
	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar	*Visual	>0.1	NEG		
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FLUID CONDITION	Sodium	ppm	ASTM D5185m	>118	<1		
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.	Boron	ppm	ASTM D5185m		57		
	Barium	ppm	ASTM D5185m		0		
	Molybdenum	ppm	ASTM D5185m		43		
	Manganese	ppm	ASTM D5185m		0		
	Magnesium	ppm	ASTM D5185m		404		
	Calcium	ppm	ASTM D5185m		1598		
	Phosphorus	ppm	ASTM D5185m		937		
	Zinc	ppm	ASTM D5185m		1045		
	Sulfur	ppm	ASTM D5185m	05	3072		
	Oxidation	Abs/.1mm	*ASTM D7414	>25	19.5		

Base Number (BN) mg KOH/g ASTM D2896

ASTM D445

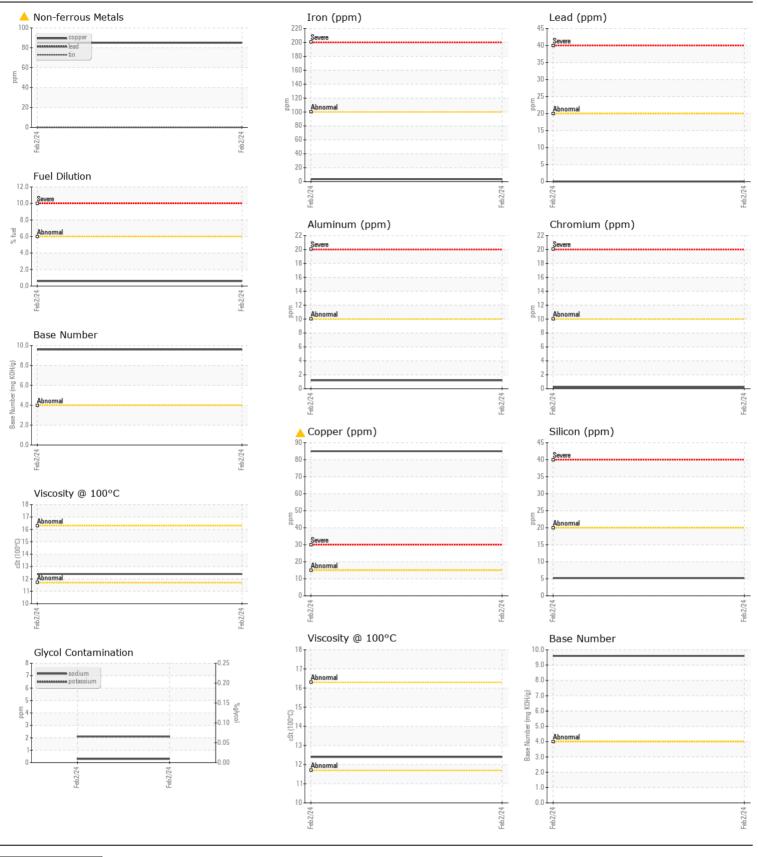
Visc @ 100°C cSt

FLUID CONDITION

9.6

12.4

WEAR **ABNORMAL** NORMAL CONTAMINATION FLUID CONDITION NORMAL



VCES- VOLVO CONSTRUCTION EQUIPMENT Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. : VCP413040 12345 MAPLEVIEW STREET Received : 13 Feb 2024 Lab Number : 06086819 Tested : 15 Feb 2024 LAKESIDE, CA : 15 Feb 2024 - Doug Bogart US 92040 Unique Number : 10874264 Diagnosed Test Package : MOB 1 (Additional Tests: FUELDILUTION, Glycol, PercentFuel, TBN) Contact: Mark Stewart Certificate L2367 mark.stewart@vcesvolvo.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. T: X: F: X: Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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Contact/Location: Mark Stewart - VOLVO4488