



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR LH40C 150109-1527
Component
Diesel Engine
Fluid
SAE 5W30 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0284853	LH0277027	---
Sample Date		Client Info		22 Mar 2024	23 Nov 2023	---
Machine Age	hrs	Client Info		2242	2110	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		N/A	N/A	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	15	19	---
Chromium	ppm	ASTM D5185(m)	>5	<1	1	---
Nickel	ppm	ASTM D5185(m)	>5	0	0	---
Titanium	ppm	ASTM D5185(m)		0	0	---
Silver	ppm	ASTM D5185(m)	>3	0	<1	---
Aluminum	ppm	ASTM D5185(m)	>15	3	4	---
Lead	ppm	ASTM D5185(m)	>30	6	10	---
Copper	ppm	ASTM D5185(m)	>125	190	294	---
Tin	ppm	ASTM D5185(m)	>5	<1	1	---
Vanadium	ppm	ASTM D5185(m)		0	0	---

CONTAMINATION

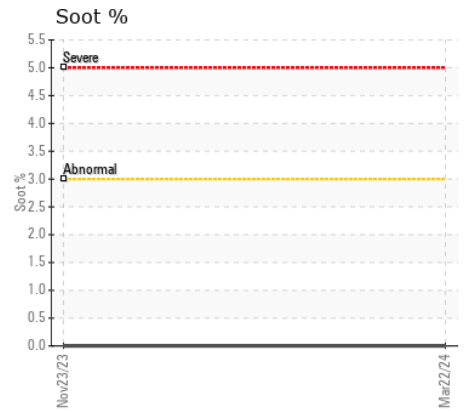
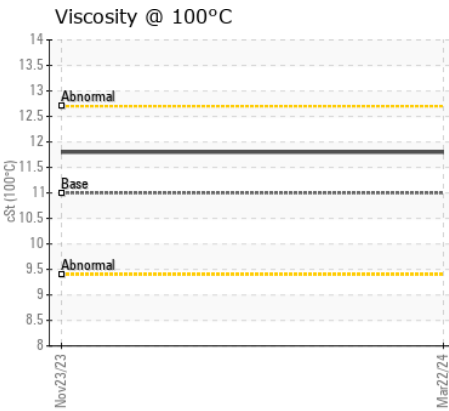
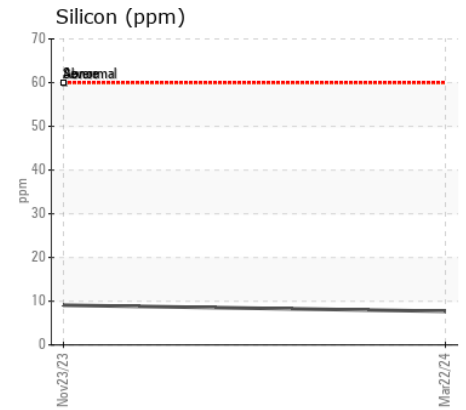
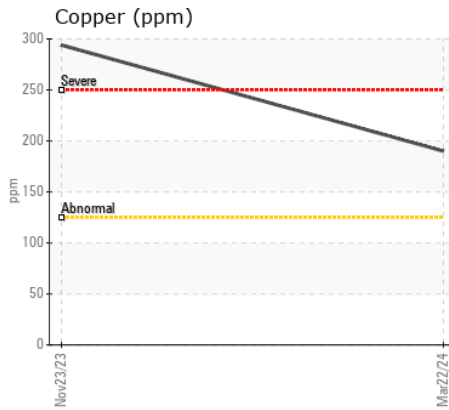
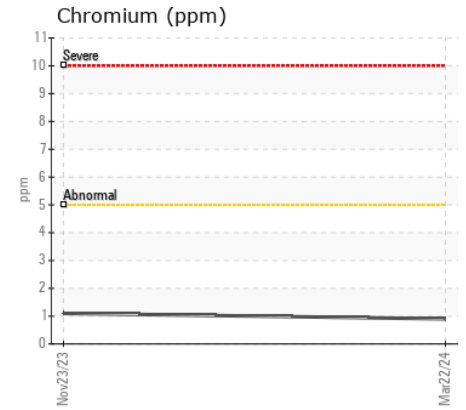
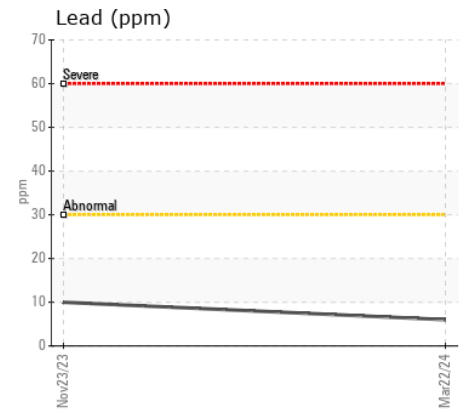
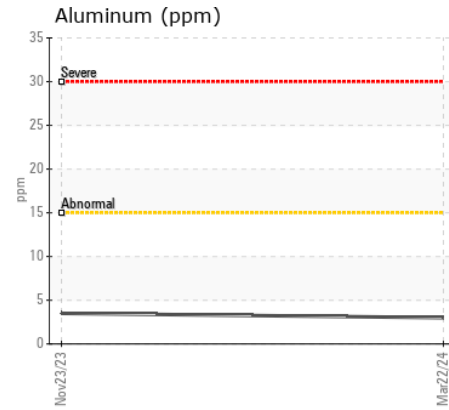
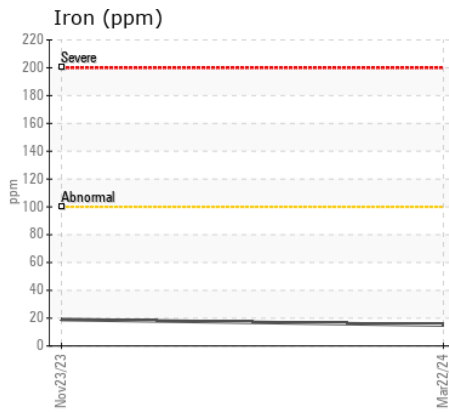
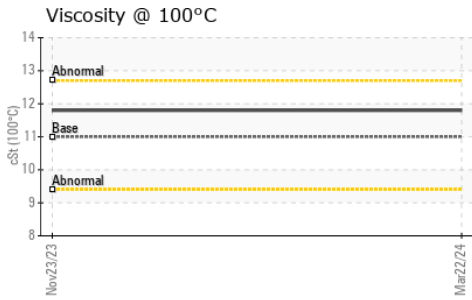
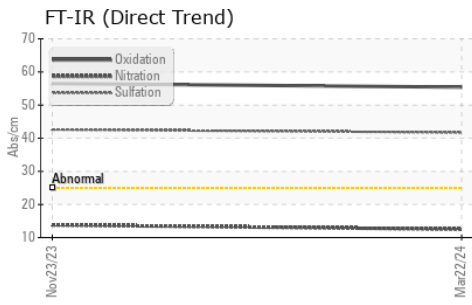
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>60	8	9	---
Potassium	ppm	ASTM D5185(m)	>20	2	2	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	0.0	---
Soot %	%	ASTM D7844*	>3	0	0	---
Nitration	Abs/cm	ASTM D7624*	>20	12.5	13.8	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	41.7	42.6	---
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	---

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		3	3	---
Boron	ppm	ASTM D5185(m)		79	51	---
Barium	ppm	ASTM D5185(m)		35	33	---
Molybdenum	ppm	ASTM D5185(m)		45	46	---
Manganese	ppm	ASTM D5185(m)		0	<1	---
Magnesium	ppm	ASTM D5185(m)		869	929	---
Calcium	ppm	ASTM D5185(m)		1321	1371	---
Phosphorus	ppm	ASTM D5185(m)		652	681	---
Zinc	ppm	ASTM D5185(m)		785	844	---
Sulfur	ppm	ASTM D5185(m)		1851	1833	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	55.4	56.5	---
Visc @ 100°C	cSt	ASTM D7279(m)	11.0	11.8	11.8	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0284853 **Received** : 05 Apr 2024
Lab Number : 02626904 **Tested** : 05 Apr 2024
Unique Number : 5760036 **Diagnosed** : 05 Apr 2024 - Kevin Marson
Test Package : MOB 1

Dartmouth Metals & Bottle Ltd.
 14 Dawn Drive
 Dartmouth, NS
 CA B3B 1H9
 Contact: Service

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.

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F: