



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR LH50M 151293-1216
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DIESEL ENGINE OIL SAE 40. Please confirm.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0290906	LH0281563	---
Sample Date		Client Info		21 May 2024	07 Dec 2023	---
Machine Age	hrs	Client Info		1496	616	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	N/A	---
Filter Changed		Client Info		N/A	N/A	---
Sample Status				NORMAL	ATTENTION	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>66	8	12	---
Chromium	ppm	ASTM D5185(m)	>4	<1	2	---
Nickel	ppm	ASTM D5185(m)	>4	0	<1	---
Titanium	ppm	ASTM D5185(m)		0	0	---
Silver	ppm	ASTM D5185(m)	>3	0	0	---
Aluminum	ppm	ASTM D5185(m)	>8	1	4	---
Lead	ppm	ASTM D5185(m)	>10	<1	9	---
Copper	ppm	ASTM D5185(m)	>74	29	250	---
Tin	ppm	ASTM D5185(m)	>4	<1	1	---
Vanadium	ppm	ASTM D5185(m)		0	0	---
White Metal	scalar	Visual*	NONE	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	VLITE	NONE	---

CONTAMINATION

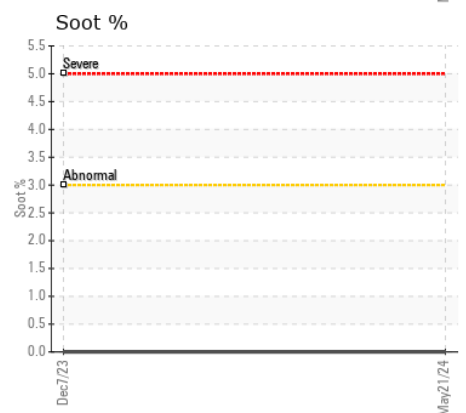
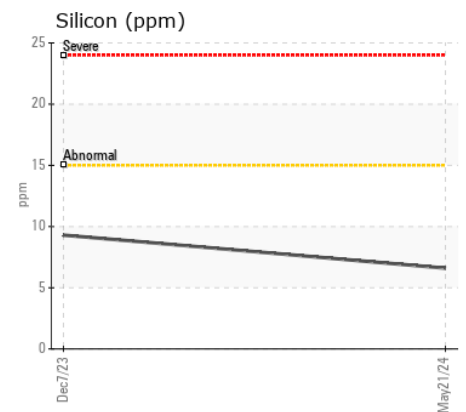
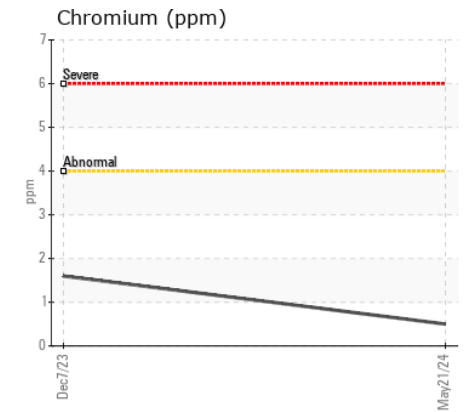
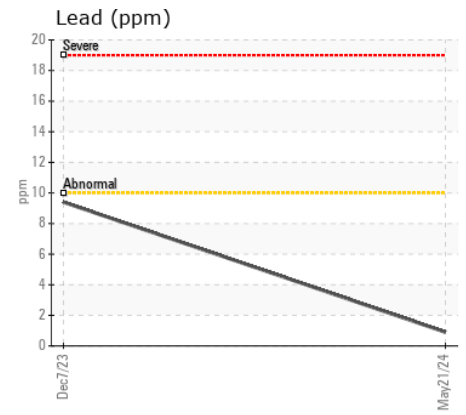
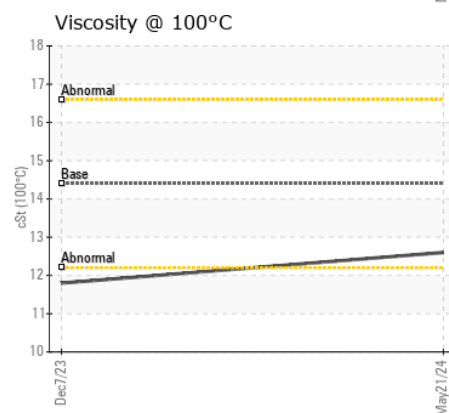
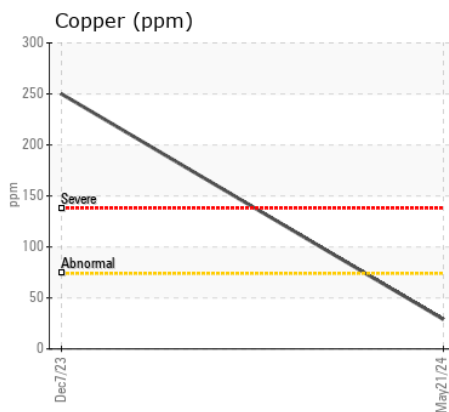
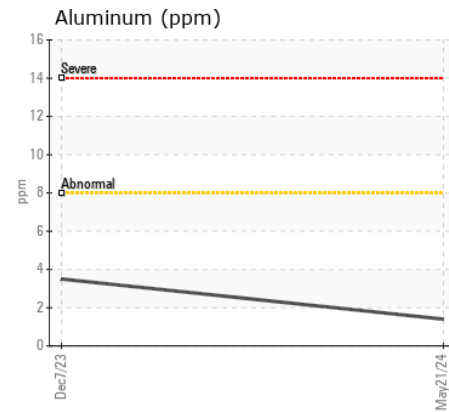
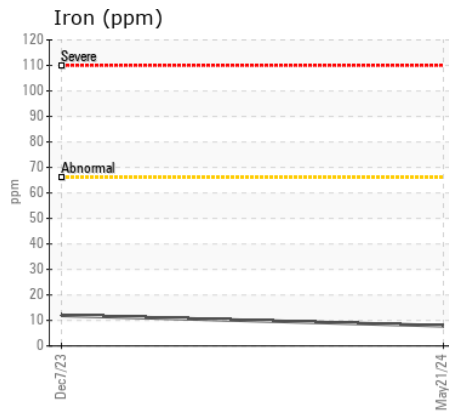
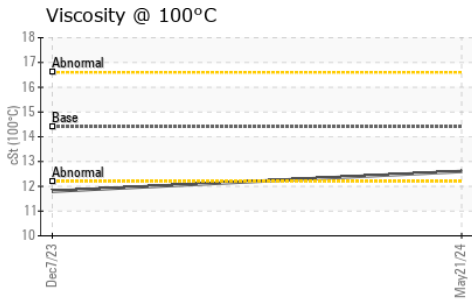
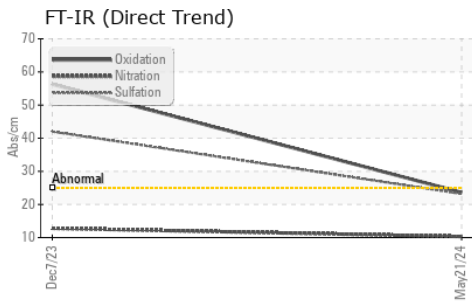
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>15	7	9	---
Potassium	ppm	ASTM D5185(m)	>20	<1	3	---
Fuel		WC Method	>5	<1.0	1.4	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	ASTM D7844*	>3	0	0	---
Nitration	Abs/cm	ASTM D7624*	>20	10.3	12.8	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	23.2	42.0	---
Silt	scalar	Visual*	NONE	VLITE	NONE	---
Debris	scalar	Visual*	NONE	VLITE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	---
Appearance	scalar	Visual*	NORML	NORML	NORML	---
Odor	scalar	Visual*	NORML	NORML	NORML	---
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	---

FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)	>216	2	3	---
Boron	ppm	ASTM D5185(m)	250	6	79	---
Barium	ppm	ASTM D5185(m)	10	3	31	---
Molybdenum	ppm	ASTM D5185(m)	100	58	47	---
Manganese	ppm	ASTM D5185(m)		<1	<1	---
Magnesium	ppm	ASTM D5185(m)	450	968	924	---
Calcium	ppm	ASTM D5185(m)	3000	1140	1365	---
Phosphorus	ppm	ASTM D5185(m)	1150	920	666	---
Zinc	ppm	ASTM D5185(m)	1350	1171	831	---
Sulfur	ppm	ASTM D5185(m)	4250	2229	1807	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	23.6	56.3	---
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	12.6	11.8	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0290906 **Received** : 22 May 2024
Lab Number : 02636861 **Tested** : 22 May 2024
Unique Number : 5786023 **Diagnosed** : 22 May 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: Visual)

1625066 ONTARIO LTD.
 870 MACKAY RD
 PICKERING, ON
 CA L1W 2Y4
 Contact: Service Manager

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: