



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR LH30M 140292-1253
Component
Diesel Engine
Fluid
{not provided} (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0278887	---	---
Sample Date		Client Info		21 Jan 2024	---	---
Machine Age	hrs	Client Info		1531	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				NORMAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>66	20	---	---
Chromium	ppm	ASTM D5185(m)	>4	3	---	---
Nickel	ppm	ASTM D5185(m)	>4	<1	---	---
Titanium	ppm	ASTM D5185(m)		0	---	---
Silver	ppm	ASTM D5185(m)	>3	0	---	---
Aluminum	ppm	ASTM D5185(m)	>8	4	---	---
Lead	ppm	ASTM D5185(m)	>10	9	---	---
Copper	ppm	ASTM D5185(m)	>74	163	---	---
Tin	ppm	ASTM D5185(m)	>4	2	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---

CONTAMINATION

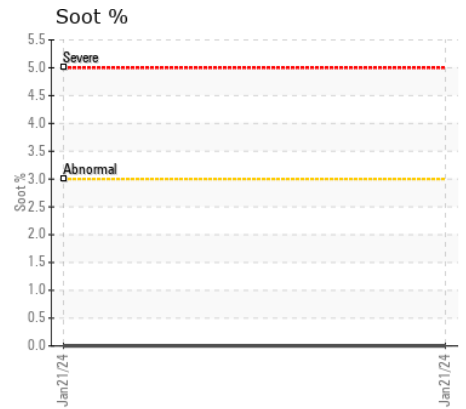
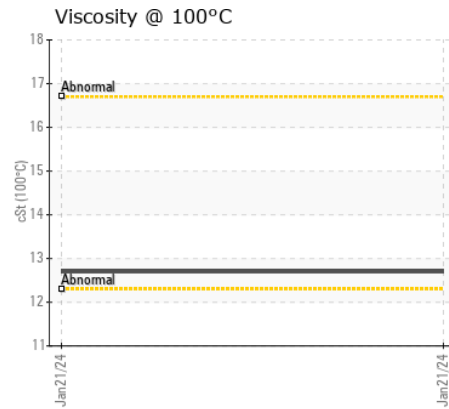
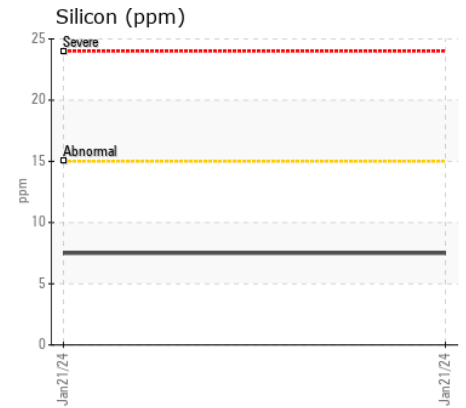
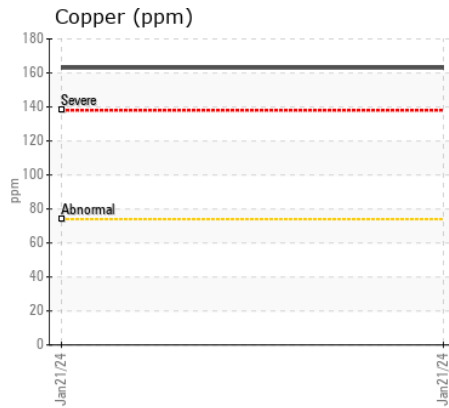
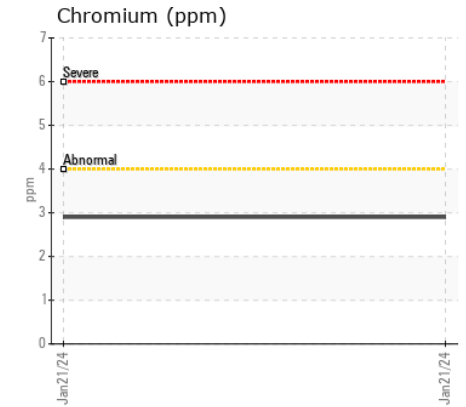
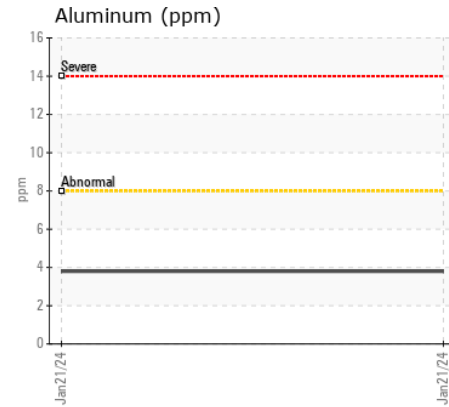
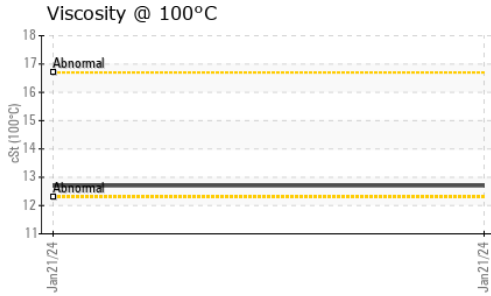
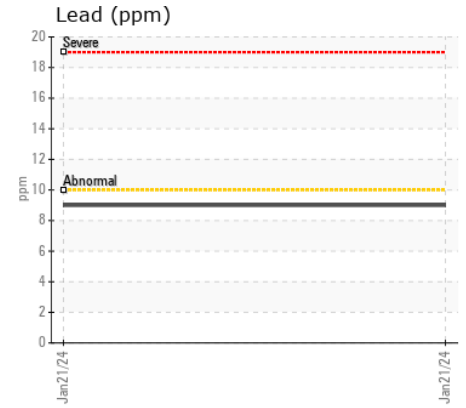
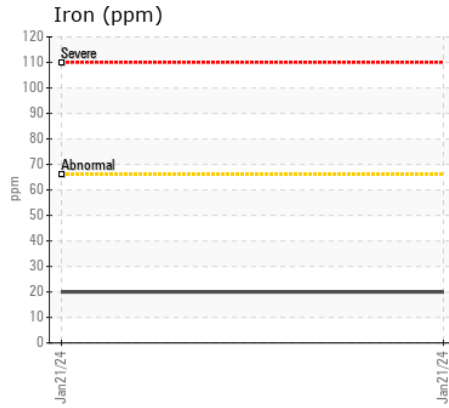
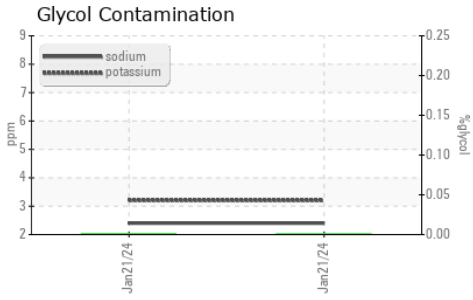
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>15	8	---	---
Potassium	ppm	ASTM D5185(m)	>20	3	---	---
Fuel		WC Method	>5	<1.0	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol	%	ASTM D7922*		0.0	---	---
Soot %	%	ASTM D7844*	>3	0	---	---
Nitration	Abs/cm	ASTM D7624*	>20	13.1	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	35.1	---	---
Emulsified Water	scalar	Visual*	>0.2	NEG	---	---

FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		2	---	---
Boron	ppm	ASTM D5185(m)		32	---	---
Barium	ppm	ASTM D5185(m)		27	---	---
Molybdenum	ppm	ASTM D5185(m)		49	---	---
Manganese	ppm	ASTM D5185(m)		<1	---	---
Magnesium	ppm	ASTM D5185(m)		910	---	---
Calcium	ppm	ASTM D5185(m)		1235	---	---
Phosphorus	ppm	ASTM D5185(m)		822	---	---
Zinc	ppm	ASTM D5185(m)		968	---	---
Sulfur	ppm	ASTM D5185(m)		2135	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	44.5	---	---
Visc @ 100°C	cSt	ASTM D7279(m)		12.7	---	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0278887 **Received** : 22 Jan 2024
Lab Number : 02610244 **Diagnosed** : 23 Jan 2024
Unique Number : 5711330 **Diagnostician** : Kevin Marson
Test Package : MOB 1 (Additional Tests: Glycol)

Markham Metals
 280 Hopkins Street
 Whitby, ON
 CA L1N 2B9
 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.

T:
F: