



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR T60-9 022201-1709
Component
Transmission (Manual)
Fluid
LIEBHERR GEAR BASIC 90 LS (--- GAL)

RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill.
Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0228242	---	---
Sample Date		Client Info		20 Feb 2024	---	---
Machine Age	hrs	Client Info		1045	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				NORMAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>200	27	---	---
Chromium	ppm	ASTM D5185(m)	>5	0	---	---
Nickel	ppm	ASTM D5185(m)	>5	0	---	---
Titanium	ppm	ASTM D5185(m)		0	---	---
Silver	ppm	ASTM D5185(m)	>7	<1	---	---
Aluminum	ppm	ASTM D5185(m)	>25	<1	---	---
Lead	ppm	ASTM D5185(m)	>45	0	---	---
Copper	ppm	ASTM D5185(m)	>225	<1	---	---
Tin	ppm	ASTM D5185(m)	>10	0	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

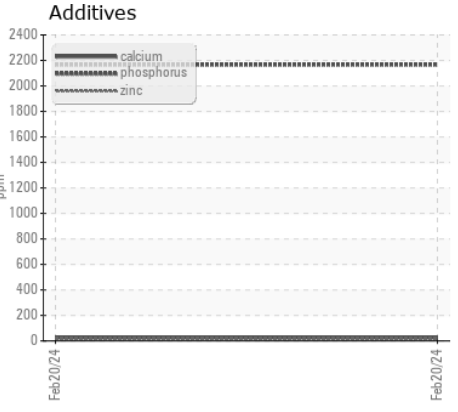
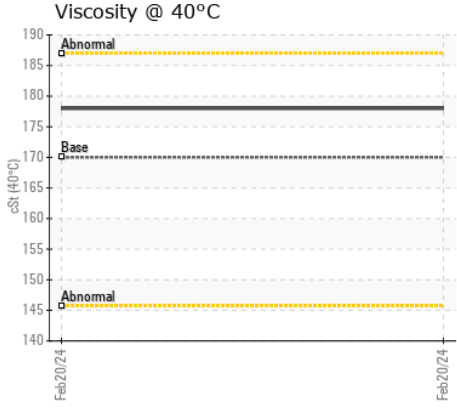
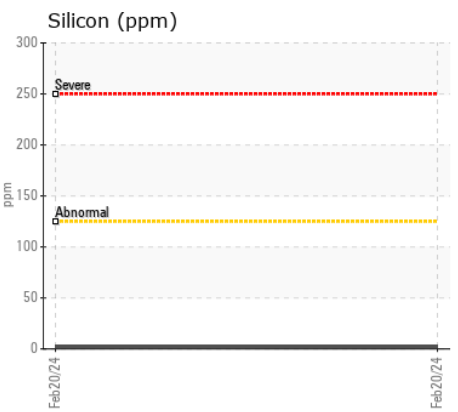
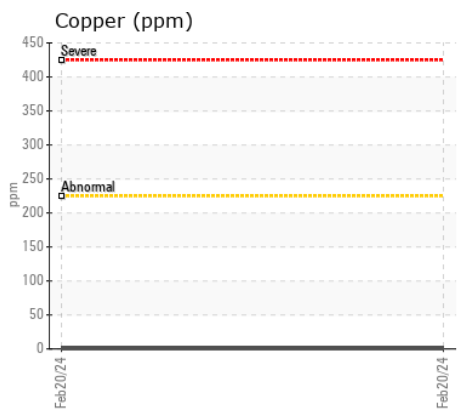
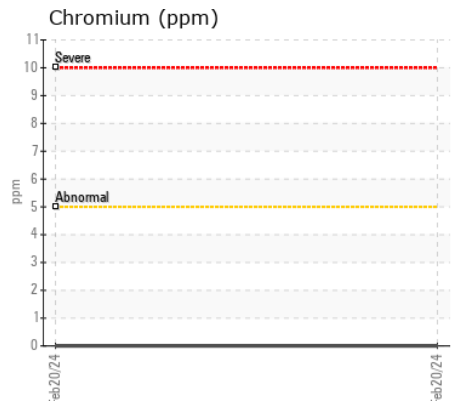
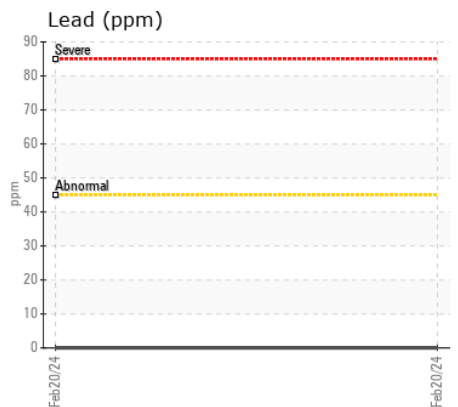
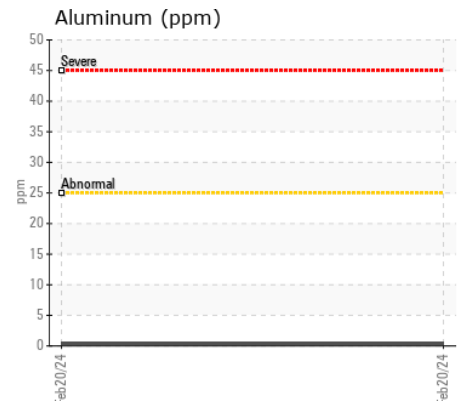
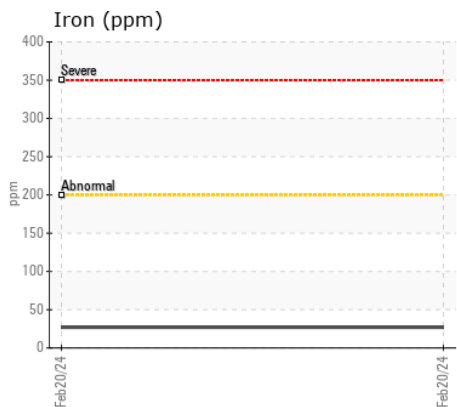
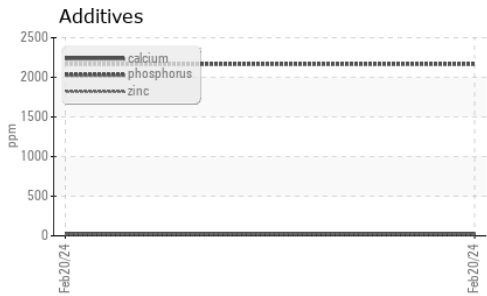
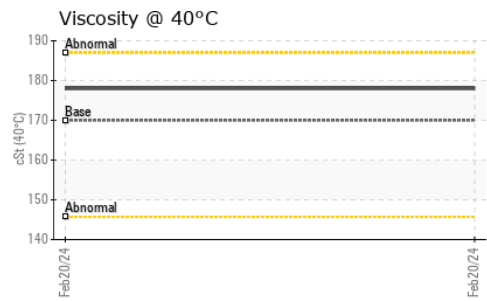
There is no indication of any contamination in the fluid.

Silicon	ppm	ASTM D5185(m)	>125	2	---	---
Potassium	ppm	ASTM D5185(m)	>20	1	---	---
Water		WC Method	>0.1	NEG	---	---
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	---	---

FLUID CONDITION

Additive levels indicate the addition of a different brand, or type of fluid.
The condition of the fluid is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		1	---	---
Boron	ppm	ASTM D5185(m)	0	2	---	---
Barium	ppm	ASTM D5185(m)	0	0	---	---
Molybdenum	ppm	ASTM D5185(m)	0	0	---	---
Manganese	ppm	ASTM D5185(m)	0	<1	---	---
Magnesium	ppm	ASTM D5185(m)	<1	1	---	---
Calcium	ppm	ASTM D5185(m)	<1	26	---	---
Phosphorus	ppm	ASTM D5185(m)	2143	2167	---	---
Zinc	ppm	ASTM D5185(m)	<1	17	---	---
Sulfur	ppm	ASTM D5185(m)	23468	24786	---	---
Visc @ 40°C	cSt	ASTM D7279(m)	170	178	---	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0228242 **Received** : 22 Feb 2024
Lab Number : 02617471 **Tested** : 22 Feb 2024
Unique Number : 5734581 **Diagnosed** : 22 Feb 2024 - Kevin Marson
Test Package : MOBCE (Additional Tests: Visual)

ECOWASTE INDUSTRIES
 4 SPRUCE ST
 NEW WESTMINSTER, BC
 CA V3L 5G6
 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: