



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
(345484)
Machine Id
LIEBHERR R914 050032-1511
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		LH	LH0279201	---
Sample Date		Client Info		18 Apr 2024	19 Mar 2024	---
Machine Age	hrs	Client Info		1761	1426	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Not Chngd	N/A	---
Filter Changed		Client Info		Not Chngd	N/A	---
Sample Status				NORMAL	ABNORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	15	42	---
Chromium	ppm	ASTM D5185(m)	>5	2	▲ 5	---
Nickel	ppm	ASTM D5185(m)	>5	0	<1	---
Titanium	ppm	ASTM D5185(m)		0	0	---
Silver	ppm	ASTM D5185(m)	>3	0	0	---
Aluminum	ppm	ASTM D5185(m)	>15	5	7	---
Lead	ppm	ASTM D5185(m)	>30	0	0	---
Copper	ppm	ASTM D5185(m)	>125	2	9	---
Tin	ppm	ASTM D5185(m)	>5	0	0	---
Vanadium	ppm	ASTM D5185(m)		0	0	---
White Metal	scalar	Visual*	NONE	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	---

CONTAMINATION

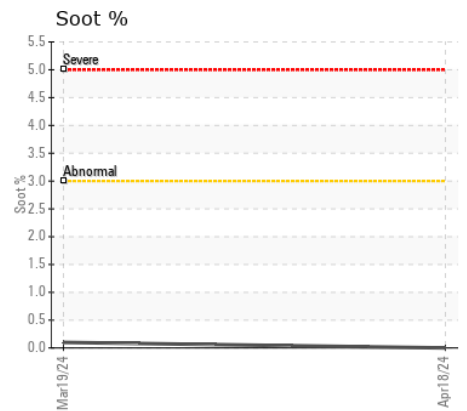
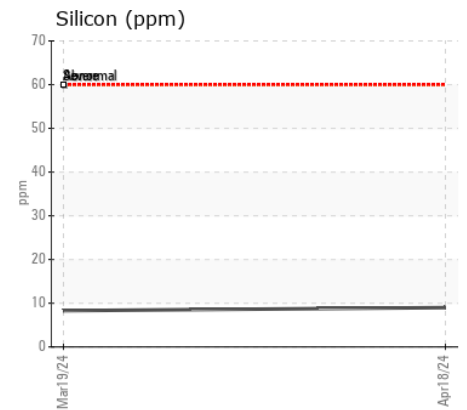
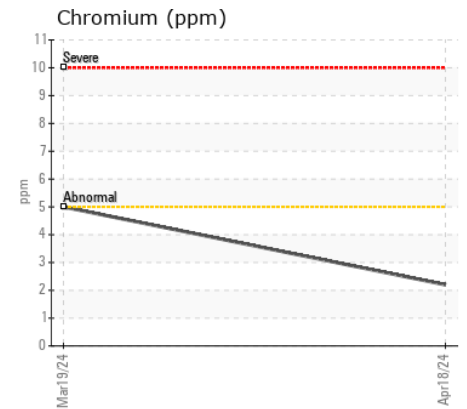
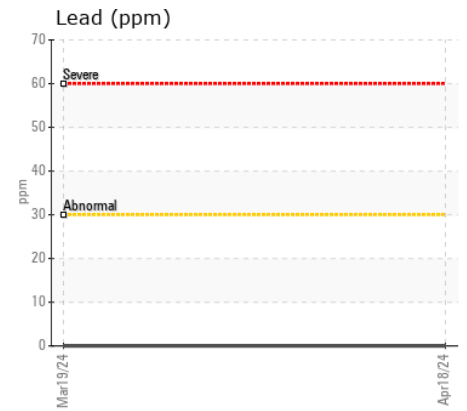
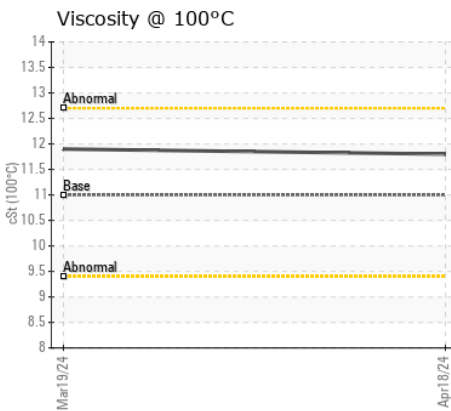
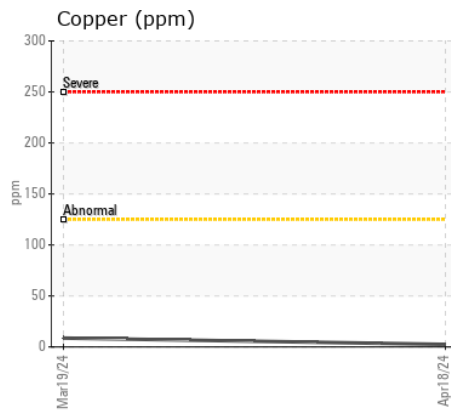
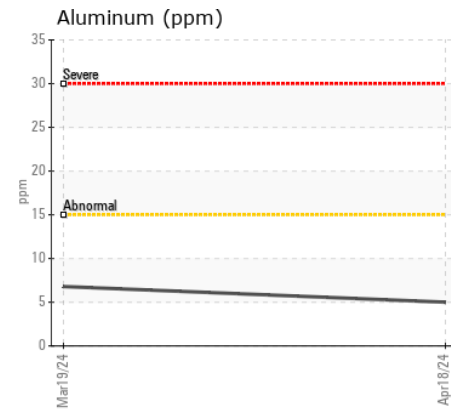
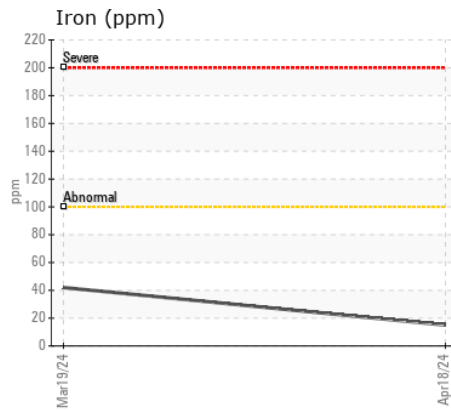
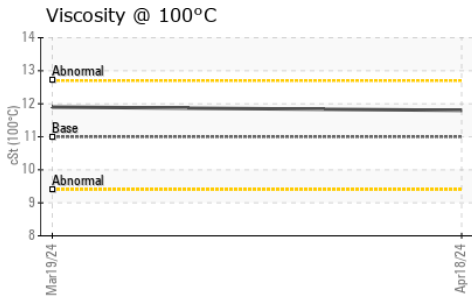
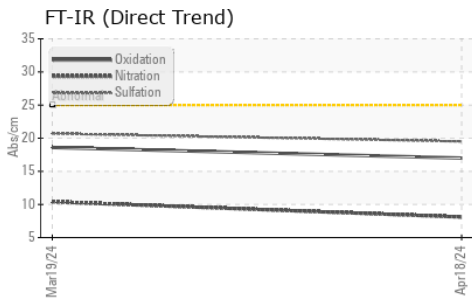
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>60	9	8	---
Potassium	ppm	ASTM D5185(m)	>20	1	2	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	ASTM D7844*	>3	0	0.1	---
Nitration	Abs/cm	ASTM D7624*	>20	8.1	10.4	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.5	20.7	---
Silt	scalar	Visual*	NONE	NONE	NONE	---
Debris	scalar	Visual*	NONE	NONE	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)		5	7	---
Boron	ppm	ASTM D5185(m)		41	14	---
Barium	ppm	ASTM D5185(m)		0	0	---
Molybdenum	ppm	ASTM D5185(m)		59	52	---
Manganese	ppm	ASTM D5185(m)		<1	0	---
Magnesium	ppm	ASTM D5185(m)		1126	1021	---
Calcium	ppm	ASTM D5185(m)		856	997	---
Phosphorus	ppm	ASTM D5185(m)		989	893	---
Zinc	ppm	ASTM D5185(m)		1181	1152	---
Sulfur	ppm	ASTM D5185(m)		2705	2472	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.0	18.6	---
Visc @ 100°C	cSt	ASTM D7279(m)	11.0	11.8	11.9	---



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH **Received** : 03 May 2024
Lab Number : 02632983 **Tested** : 03 May 2024
Unique Number : 5774136 **Diagnosed** : 03 May 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: Visual)

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.

ROLAND MUNGER
 2665 AVENUE DU LABRADOR
 BAIE COMEAU, QC
 CA G4Z 3B9
 Contact: Roland Munger

T: (661)015-6791
 F: