



LIEBHERR

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR LH50M 077508
Component
Front Left Wheel Hub
Fluid
GEAR OIL SAE 80 (--- GAL)

RECOMMENDATION

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) GEAR OIL SAE 80. Please confirm.

WEAR

Iron ppm levels are abnormal. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion.

CONTAMINATION

There is no indication of any contamination in the oil.

FLUID CONDITION

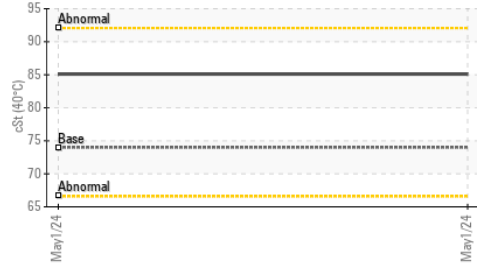
The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH	---	---
Sample Date		Client Info		01 May 2024	---	---
Machine Age	hrs	Client Info		16364	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				ABNORMAL	---	---
PQ		ASTM D8184*	>700	15	---	---
Iron	ppm	ASTM D5185(m)	>325	▲ 333	---	---
Chromium	ppm	ASTM D5185(m)	>3	1	---	---
Nickel	ppm	ASTM D5185(m)	>2	<1	---	---
Titanium	ppm	ASTM D5185(m)	>4	0	---	---
Silver	ppm	ASTM D5185(m)	>2	0	---	---
Aluminum	ppm	ASTM D5185(m)	>10	1	---	---
Lead	ppm	ASTM D5185(m)	>3	0	---	---
Copper	ppm	ASTM D5185(m)	>70	4	---	---
Tin	ppm	ASTM D5185(m)	>2	0	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---
Silicon	ppm	ASTM D5185(m)	>70	8	---	---
Potassium	ppm	ASTM D5185(m)	>20	2	---	---
Water		WC Method	>0.2	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*	>0.2	NEG	---	---
Sodium	ppm	ASTM D5185(m)		5	---	---
Boron	ppm	ASTM D5185(m)	400	137	---	---
Barium	ppm	ASTM D5185(m)	200	<1	---	---
Molybdenum	ppm	ASTM D5185(m)	12	0	---	---
Manganese	ppm	ASTM D5185(m)		3	---	---
Magnesium	ppm	ASTM D5185(m)	12	7	---	---
Calcium	ppm	ASTM D5185(m)	150	22	---	---
Phosphorus	ppm	ASTM D5185(m)	1650	1198	---	---
Zinc	ppm	ASTM D5185(m)	125	55	---	---
Sulfur	ppm	ASTM D5185(m)	22500	21615	---	---
Visc @ 40°C	cSt	ASTM D7279(m)	74	85.1	---	---

▲ Ferrous Alloys



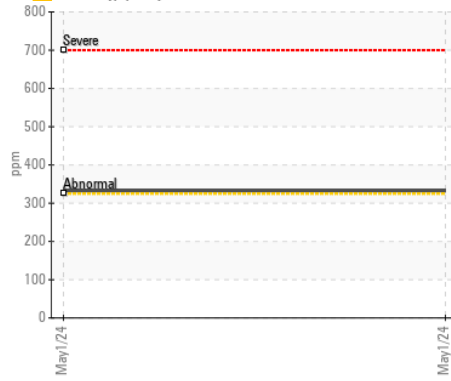
Viscosity @ 40°C



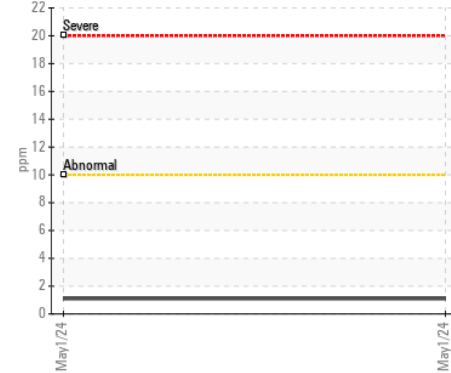
PQ



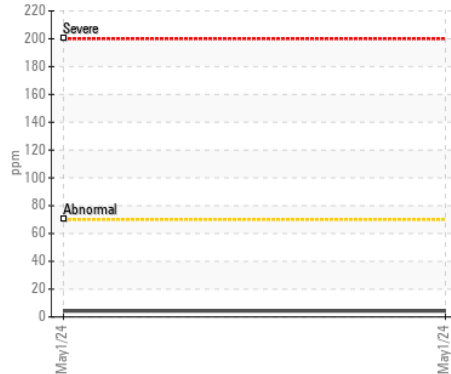
▲ Iron (ppm)



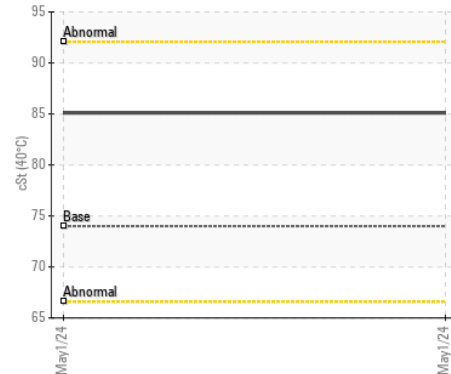
Aluminum (ppm)



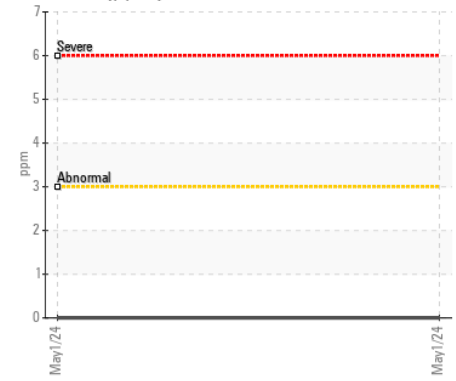
Copper (ppm)



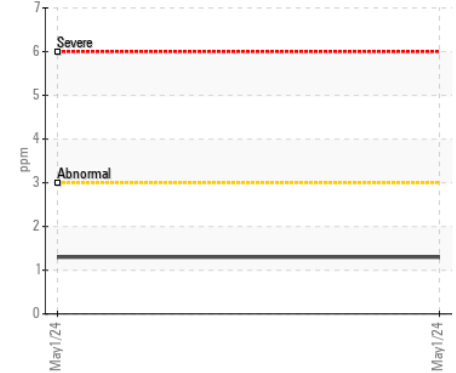
Viscosity @ 40°C



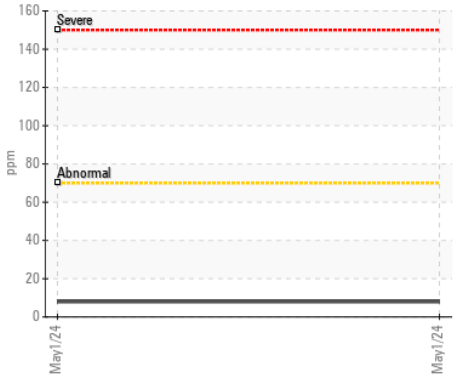
Lead (ppm)



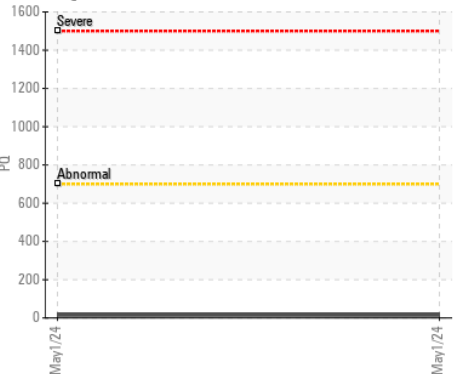
Chromium (ppm)



Silicon (ppm)



PQ



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH
Lab Number : 02635013
Unique Number : 5776166
Test Package : MOB 1 (Additional Tests: PQ)

Received : 13 May 2024
Tested : 14 May 2024
Diagnosed : 14 May 2024 - Kevin Marson

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.

J.M. BASTILLE ACIER INC
 396 RUE TEMISCOUATA,, CP 744
 RIVIERE DU LOUP, QC
 CA G5R 3Z3
 Contact: MANAGER SERVICE

T: (418)862-3346
 F: