



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
145797-1218 LIEBHERR LH80M 145797-1218
Component
Front Left Wheel Hub
Fluid
LIEBHERR GEAR BASIC 90 LS (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0257703	LH0257714	---
Sample Date		Client Info		10 Jun 2024	09 Apr 2024	---
Machine Age	hrs	Client Info		2017	1579	---
Oil Age	hrs	Client Info		500	500	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>650	28	45	---
Chromium	ppm	ASTM D5185m	>4	<1	<1	---
Nickel	ppm	ASTM D5185m	>4	<1	<1	---
Titanium	ppm	ASTM D5185m	>4	<1	<1	---
Silver	ppm	ASTM D5185m		<1	0	---
Aluminum	ppm	ASTM D5185m	>25	2	2	---
Lead	ppm	ASTM D5185m	>4	<1	<1	---
Copper	ppm	ASTM D5185m	>60	3	6	---
Tin	ppm	ASTM D5185m	>4	<1	<1	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

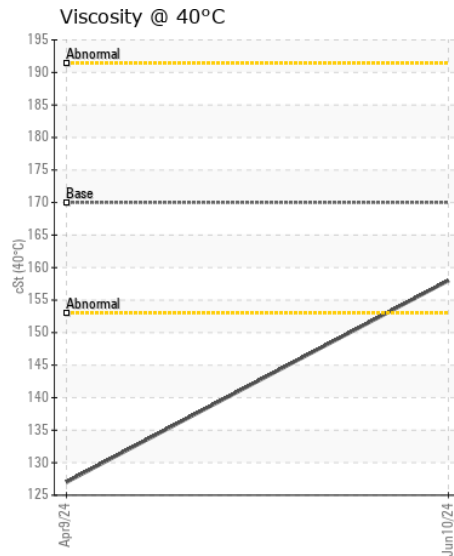
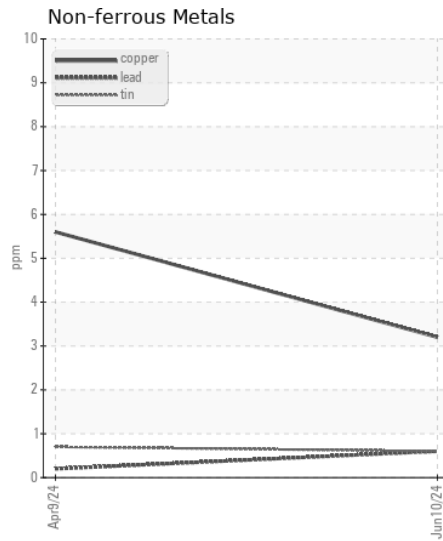
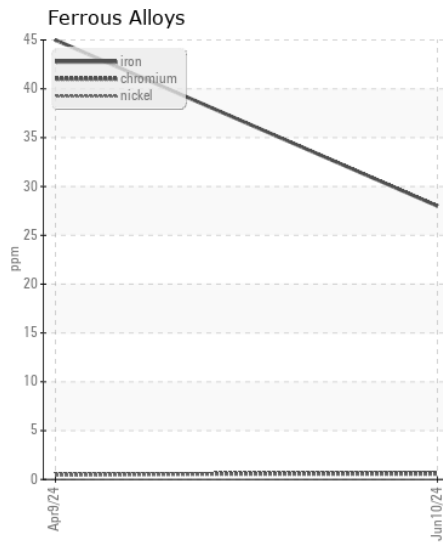
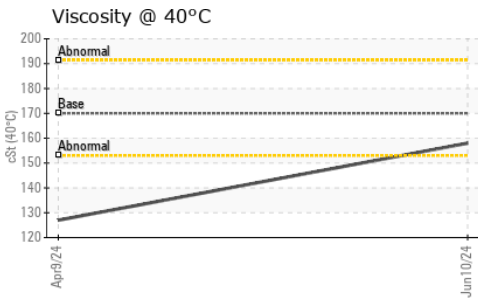
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	5	9	---
Potassium	ppm	ASTM D5185m	>20	2	2	---
Water		WC Method	>0.2	NEG	NEG	---
Silt	scalar	*Visual	NONE	NONE	MODER	---
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 D5185m		4	6	---
Boron	ppm	ASTM D5185m	0	60	193	---
Barium	ppm	ASTM D5185m	0	1	1	---
Molybdenum	ppm	ASTM D5185m	0	2	6	---
Manganese	ppm	ASTM D5185m	0	1	1	---
Magnesium	ppm	ASTM D5185m	<1	14	35	---
Calcium	ppm	ASTM D5185m	<1	89	87	---
Phosphorus	ppm	ASTM D5185m	2143	2410	2363	---
Zinc	ppm	ASTM D5185m	<1	60	68	---
Sulfur	ppm	ASTM D5185m	23468	25813	22201	---
Visc @ 40°C	cSt	ASTM D445	170	158	127	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LH0257703
Lab Number : 06222713
Unique Number : 11100910
Test Package : CONST

Received : 27 Jun 2024
Tested : 01 Jul 2024
Diagnosed : 01 Jul 2024 - Wes Davis

TEXAS PORT RECYCLING - HOUSTON PORT
 8945 MANCHESTER ST
 HOUSTON, TX
 US 77012
 Contact: Dale Shaw
 dale.shaw@tmrecycling.com

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

F: (713)921-5545