



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
145797-1218 LIEBHERR LH80M 145797-1218
Component
Rear Differential
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		LH0257707	LH0257721	---
Sample Date		Client Info		10 Jun 2024	09 Apr 2024	---
Machine Age	hrs	Client Info		2017	1579	---
Oil Age	hrs	Client Info		1000	500	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	Not Changd	---
Filter Changed		Client Info		Changed	Not Changed	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	16	10	---
Chromium	ppm	ASTM D5185m	>5	<1	<1	---
Nickel	ppm	ASTM D5185m	>10	<1	<1	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m		<1	0	---
Aluminum	ppm	ASTM D5185m	>5	2	2	---
Lead	ppm	ASTM D5185m	>5	<1	<1	---
Copper	ppm	ASTM D5185m	>125	6	6	---
Tin	ppm	ASTM D5185m	>5	<1	<1	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

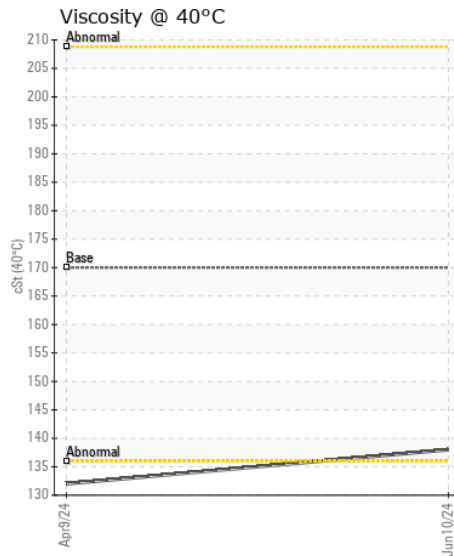
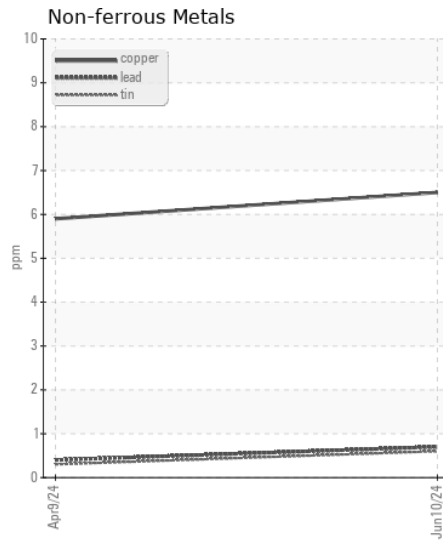
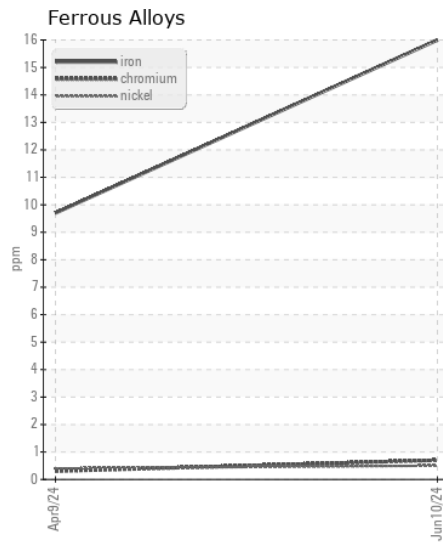
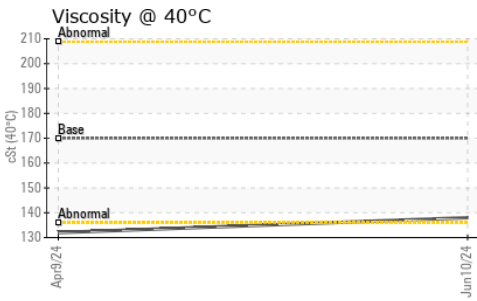
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	5	3	---
Potassium	ppm	ASTM D5185m	>20	1	2	---
Water		WC Method	>0.2	NEG	NEG	---
Silt	scalar	*Visual	NONE	NONE	LIGHT	---
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		3	2	---
Boron	ppm	ASTM D5185m	0	109	146	---
Barium	ppm	ASTM D5185m	0	1	<1	---
Molybdenum	ppm	ASTM D5185m	0	5	6	---
Manganese	ppm	ASTM D5185m	0	1	<1	---
Magnesium	ppm	ASTM D5185m	<1	29	34	---
Calcium	ppm	ASTM D5185m	<1	107	85	---
Phosphorus	ppm	ASTM D5185m	2143	2506	2401	---
Zinc	ppm	ASTM D5185m	<1	78	57	---
Sulfur	ppm	ASTM D5185m	23468	22931	20351	---
Visc @ 40°C	cSt	ASTM D445	170	138	132	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LH0257707
Lab Number : 06222710
Unique Number : 11100907
Test Package : CONST

Received : 27 Jun 2024
Tested : 28 Jun 2024
Diagnosed : 29 Jun 2024 - Don Baldrige

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)

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