



# LIEBHERR

## OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id  
**145797-1218 LIEBHERR LH80M 145797-1218**  
Component  
**Rear Right Wheel Hub**  
Fluid  
**LIEBHERR GEAR BASIC 90 LS (--- GAL)**

### RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0257712	---	---
Sample Date		Client Info		09 Apr 2024	---	---
Machine Age	hrs	Client Info		1579	---	---
Oil Age	hrs	Client Info		500	---	---
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 D5185m	>650	11	---	---
Chromium	ppm	ASTM D5185m	>4	<1	---	---
Nickel	ppm	ASTM D5185m	>4	<1	---	---
Titanium	ppm	ASTM D5185m	>4	<1	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m	>25	2	---	---
Lead	ppm	ASTM D5185m	>4	<1	---	---
Copper	ppm	ASTM D5185m	>60	6	---	---
Tin	ppm	ASTM D5185m	>4	<1	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

### CONTAMINATION

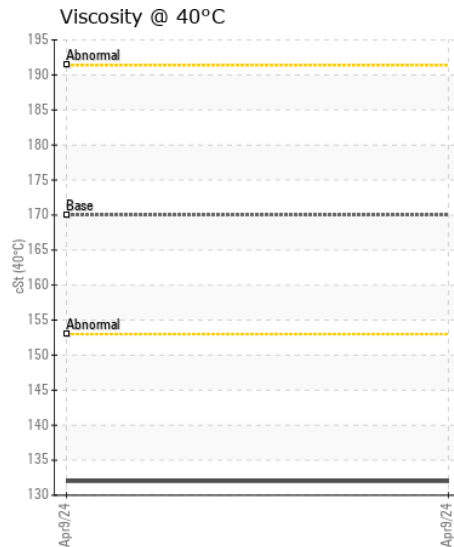
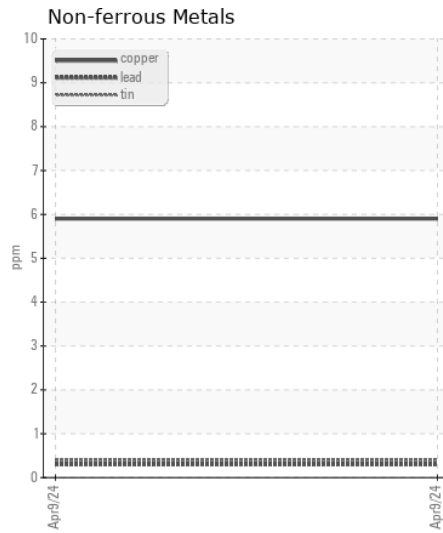
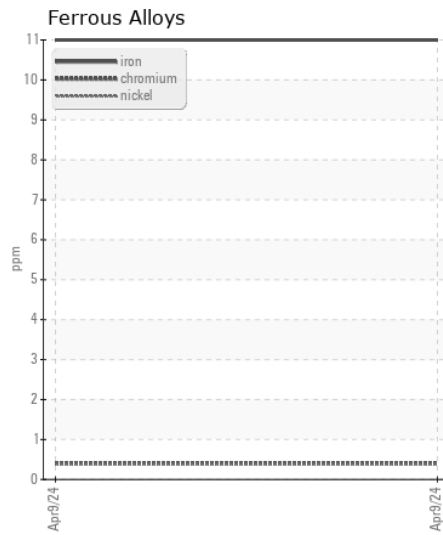
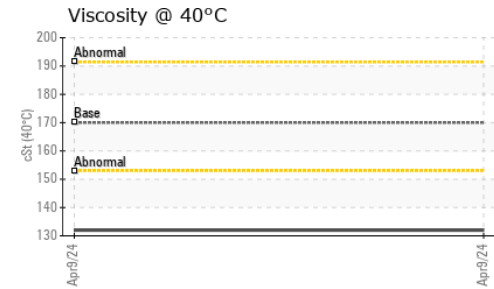
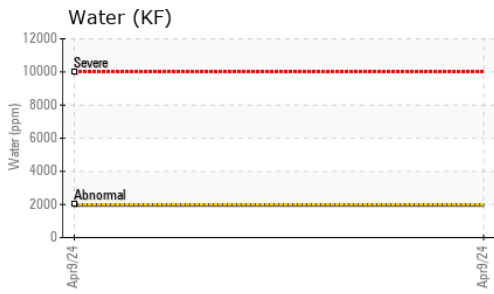
The water content is negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	4	---	---
Potassium	ppm	ASTM D5185m	>20	2	---	---
Water	%	ASTM D6304	>0.2	0.196	---	---
ppm Water	ppm	ASTM D6304	>2000	1960	---	---
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	0.2%	---	---

### FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		2	---	---
Boron	ppm	ASTM D5185m	0	144	---	---
Barium	ppm	ASTM D5185m	0	<1	---	---
Molybdenum	ppm	ASTM D5185m	0	6	---	---
Manganese	ppm	ASTM D5185m	0	<1	---	---
Magnesium	ppm	ASTM D5185m	<1	34	---	---
Calcium	ppm	ASTM D5185m	<1	85	---	---
Phosphorus	ppm	ASTM D5185m	2143	2336	---	---
Zinc	ppm	ASTM D5185m	<1	56	---	---
Sulfur	ppm	ASTM D5185m	23468	19872	---	---
Visc @ 40°C	cSt	ASTM D445	170	132	---	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LH0257712 **Received** : 19 Jun 2024  
**Lab Number** : 06215173 **Tested** : 20 Jun 2024  
**Unique Number** : 11088037 **Diagnosed** : 21 Jun 2024 - Sean Felton  
**Test Package** : CONST ( Additional Tests: KF )

**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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