



LIEBHERR

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR L556 072521-1826
Component
Rear Differential
Fluid
LIEBHERR GEAR BASIC 90 LS (--- GAL)

RECOMMENDATION

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		LH0259155	---	---
Sample Date		Client Info		05 Apr 2024	---	---
Machine Age	hrs	Client Info		681	---	---
Oil Age	hrs	Client Info		681	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Not Changed	---	---
Filter Changed		Client Info		Not Changed	---	---
Sample Status				ABNORMAL	---	---

WEAR

The copper level is abnormal. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>1000	163	---	---
Chromium	ppm	ASTM D5185m	>10	2	---	---
Nickel	ppm	ASTM D5185m	>2	3	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m	>25	2	---	---
Lead	ppm	ASTM D5185m	>5	<1	---	---
Copper	ppm	ASTM D5185m	>100	▲ 128	---	---
Tin	ppm	ASTM D5185m	>10	5	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

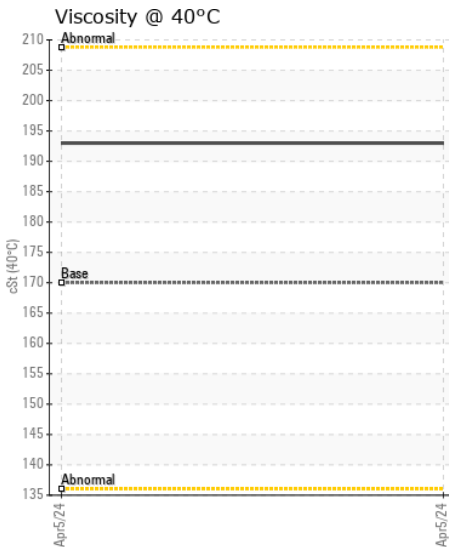
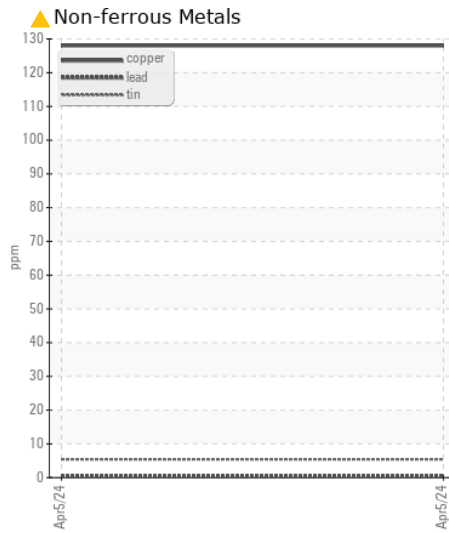
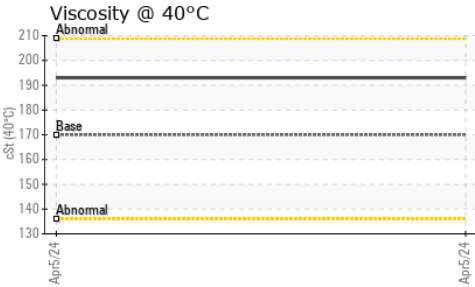
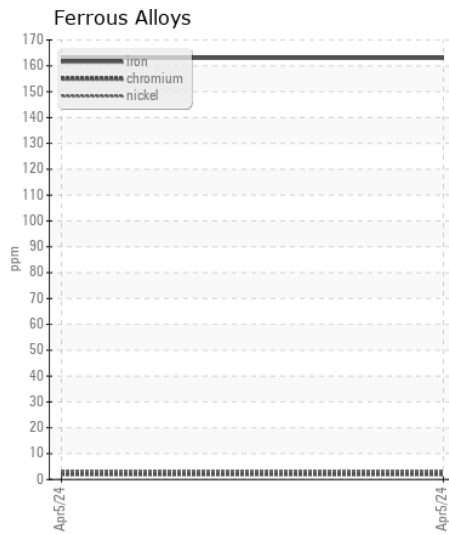
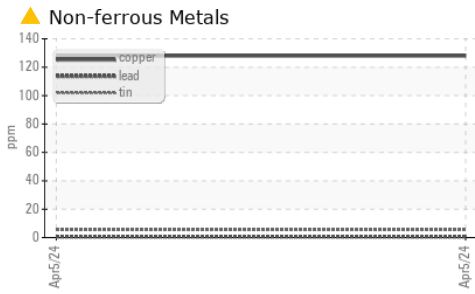
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>100	24	---	---
Potassium	ppm	ASTM D5185m	>20	<1	---	---
Water		WC Method	>.2	NEG	---	---
Silt	scalar	*Visual	NONE	LIGHT	---	---
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	>.2	NEG	---	---

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		7	---	---
Boron	ppm	ASTM D5185m	0	3	---	---
Barium	ppm	ASTM D5185m	0	<1	---	---
Molybdenum	ppm	ASTM D5185m	0	<1	---	---
Manganese	ppm	ASTM D5185m	0	35	---	---
Magnesium	ppm	ASTM D5185m	<1	2	---	---
Calcium	ppm	ASTM D5185m	<1	3	---	---
Phosphorus	ppm	ASTM D5185m	2143	2328	---	---
Zinc	ppm	ASTM D5185m	<1	58	---	---
Sulfur	ppm	ASTM D5185m	23468	28062	---	---
Visc @ 40°C	cSt	ASTM D445	170	193	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : LH0259155

Lab Number : 06215156

Unique Number : 11088020

Test Package : CONST

Received : 19 Jun 2024

Tested : 20 Jun 2024

Diagnosed : 21 Jun 2024 - Sean Felton

DERICHEBOURG RECYCLING

1 WHARF ST

HOUSTON, TX

US 77012

Contact: JEFF MCLEROY

jeff.mcleroy@derichebourg.com

T: (281)642-6680

F:

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)