



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
RMR-Louisvile
Machine Id
114199-1217 LIEBHERR LH60M 114199-1217
Component
Rear Left Wheel Hub
Fluid
GEAR OIL SAE 80W90 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DJJ0015456	LHMC79922	LHMC107721
Sample Date		Client Info		15 Apr 2024	16 Jun 2021	18 Nov 2020
Machine Age	hrs	Client Info		10230	4478	3111
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		N/A	Not Changed	Not Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>650	27	13	20
Chromium	ppm	ASTM D5185m	>4	0	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	<1	<1
Titanium	ppm	ASTM D5185m	>4	0	0	0
Silver	ppm	ASTM D5185m		0	<1	0
Aluminum	ppm	ASTM D5185m	>25	<1	0	<1
Lead	ppm	ASTM D5185m	>4	0	0	0
Copper	ppm	ASTM D5185m	>60	0	9	18
Tin	ppm	ASTM D5185m	>4	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

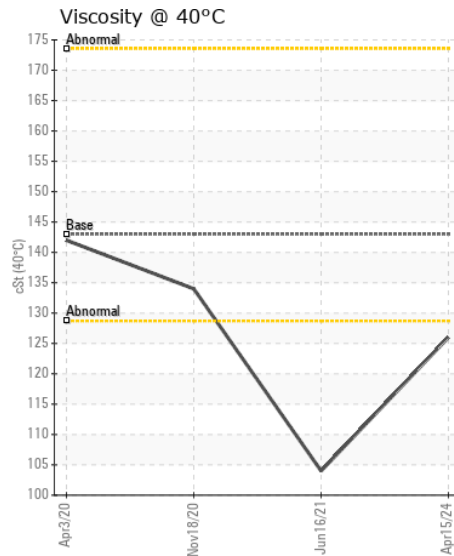
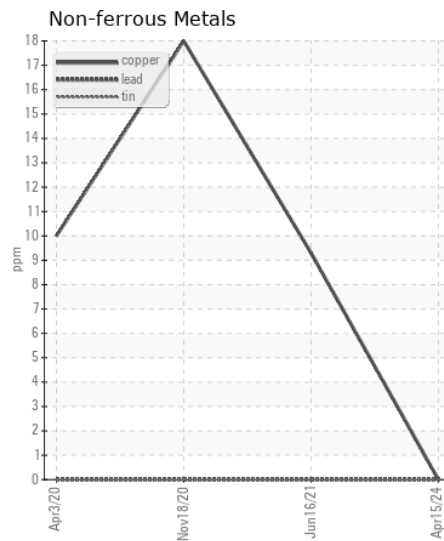
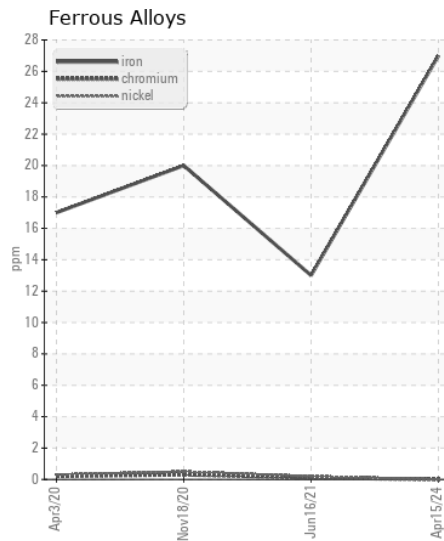
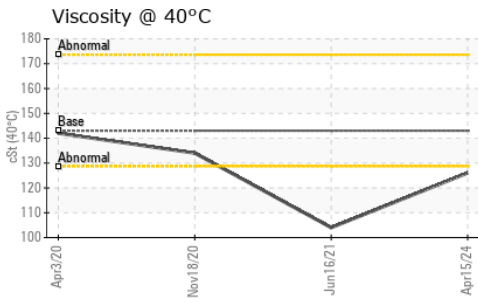
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	2	2	<1
Potassium	ppm	ASTM D5185m	>20	1	<1	0
Water		WC Method	>0.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	MODER	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m	>170	0	2	2
Boron	ppm	ASTM D5185m	400	<1	14	52
Barium	ppm	ASTM D5185m	200	0	24	143
Molybdenum	ppm	ASTM D5185m	12	<1	<1	<1
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	12	0	2	2
Calcium	ppm	ASTM D5185m	150	9	9	17
Phosphorus	ppm	ASTM D5185m	1650	204	455	890
Zinc	ppm	ASTM D5185m	125	0	0	15
Sulfur	ppm	ASTM D5185m	22500	16316	11121	17872
Visc @ 40°C	cSt	ASTM D445	143	126	104	134



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DJJ0015456
Lab Number : 06154946
Unique Number : 10990369
Test Package : CONST

Received : 19 Apr 2024
Tested : 22 Apr 2024
Diagnosed : 24 Apr 2024 - Jonathan Hester

RIVER METALS RECYCLING - LOUISVILLE
 PO BOX 6521
 LOUISVILLE, KY
 US 40206
 Contact: RYAN BOWDEN

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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