



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
RMR-Louisvile
 Machine Id
114199-1217 LIEBHERR LH60M 114199-1217
 Component
Front 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		DJJ0017746	DJJ0016376	DJJ0011458
Sample Date		Client Info		15 Apr 2024	08 Mar 2023	03 Jan 2022
Machine Age	hrs	Client Info		10230	8152	5677
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Filter Changed		Client Info		N/A	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>650	26	29	49
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	0	0
Aluminum	ppm	ASTM D5185m	>25	<1	1	0
Lead	ppm	ASTM D5185m	>4	0	0	<1
Copper	ppm	ASTM D5185m	>60	0	2	8
Tin	ppm	ASTM D5185m	>4	0	0	<1
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	MODER	MODER
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

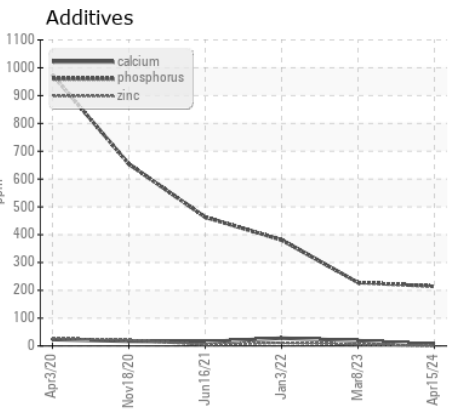
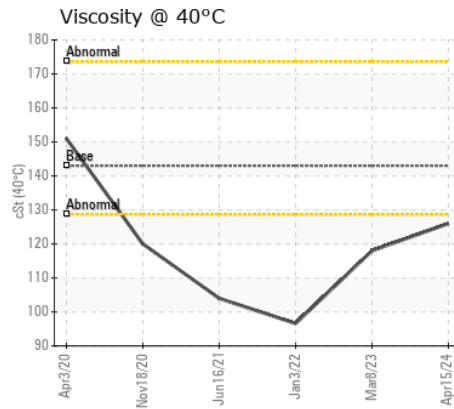
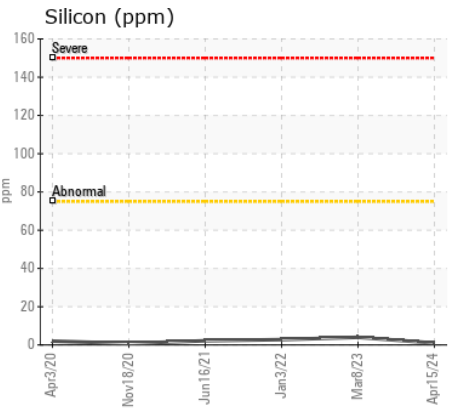
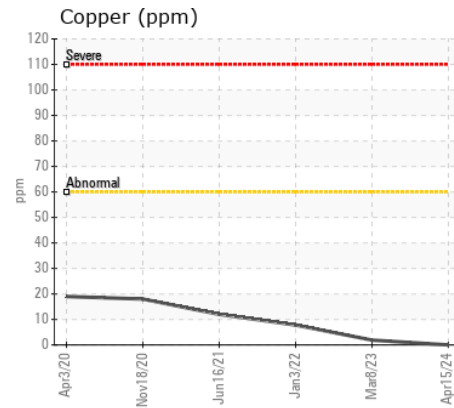
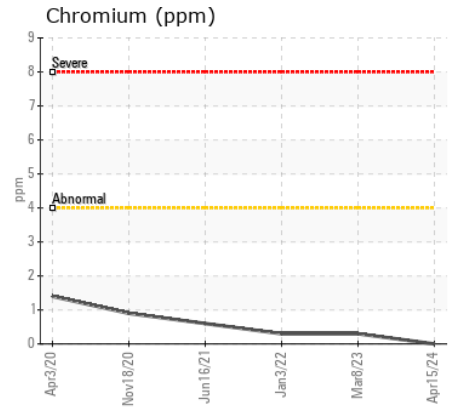
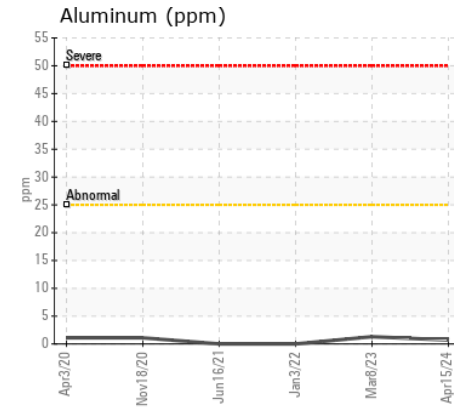
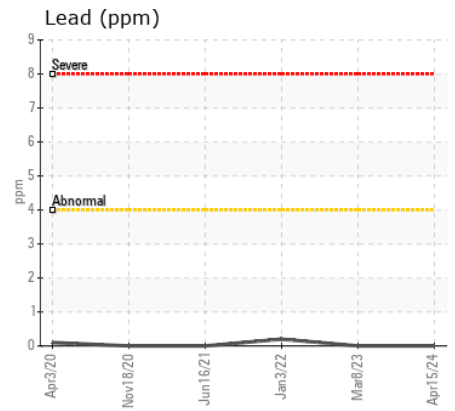
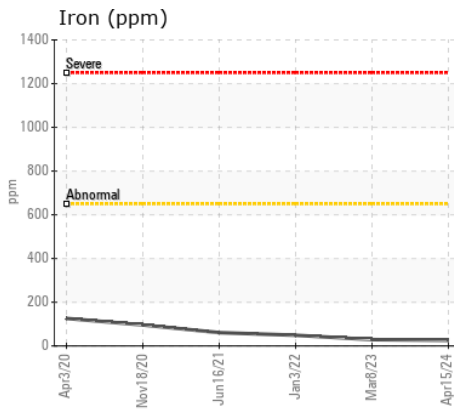
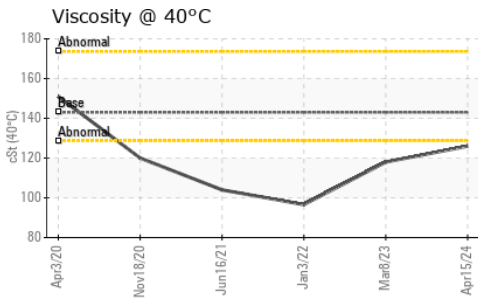
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	1	4	3
Potassium	ppm	ASTM D5185m	>20	1	1	<1
Water		WC Method	>0.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	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	0	0
Boron	ppm	ASTM D5185m	400	4	5	0
Barium	ppm	ASTM D5185m	200	0	0	6
Molybdenum	ppm	ASTM D5185m	12	<1	3	1
Manganese	ppm	ASTM D5185m		<1	<1	1
Magnesium	ppm	ASTM D5185m	12	0	3	6
Calcium	ppm	ASTM D5185m	150	5	19	28
Phosphorus	ppm	ASTM D5185m	1650	214	228	381
Zinc	ppm	ASTM D5185m	125	0	6	11
Sulfur	ppm	ASTM D5185m	22500	17045	14731	19896
Visc @ 40°C	cSt	ASTM D445	143	126	118	96.6



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DJJ0017746
Lab Number : 06154943
Unique Number : 10990366
Test Package : MOBCE

Received : 19 Apr 2024
Tested : 22 Apr 2024
Diagnosed : 24 Apr 2024 - Sean Felton

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)

T:
 F: (502)587-8699