



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
RMR-Louisvile
Machine Id
114199-1217 LIEBHERR LH60M 114199-1217
Component
Swing Drive
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		DJJ0017752	DJJ0016375	DJJ0011456
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		Changed	Changed	Not Changd
Sample Status				NORMAL	ABNORMAL	SEVERE

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>350	52	▲ 397	▲ 1246
Chromium	ppm	ASTM D5185m	>15	<1	4	14
Nickel	ppm	ASTM D5185m	>5	0	<1	1
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>5	2	0	1
Lead	ppm	ASTM D5185m	>10	0	<1	<1
Copper	ppm	ASTM D5185m	>300	15	94	269
Tin	ppm	ASTM D5185m	>15	<1	3	4
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

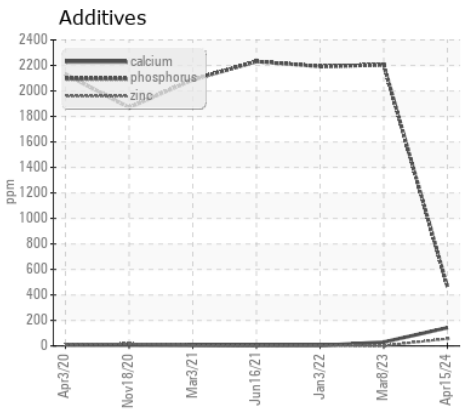
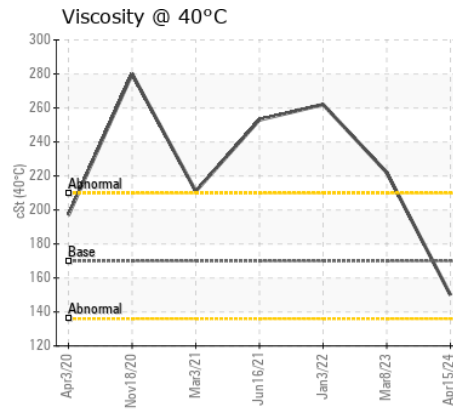
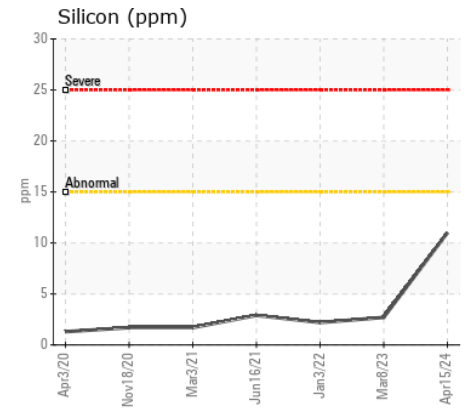
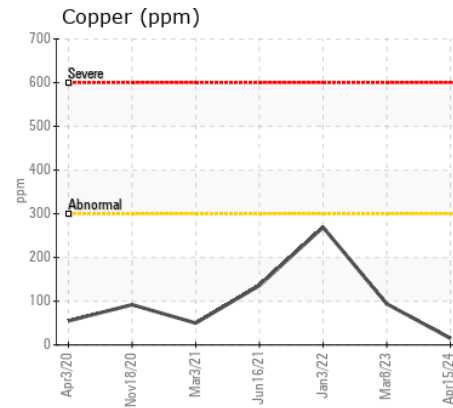
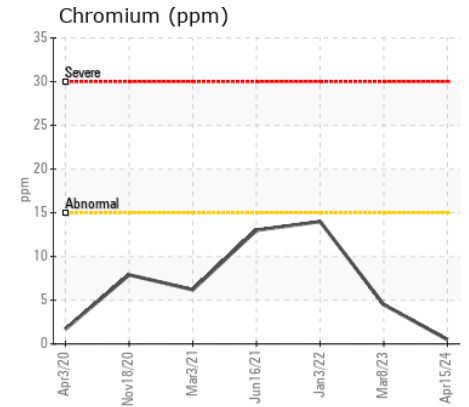
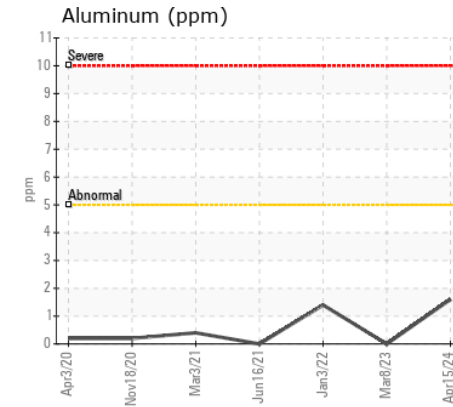
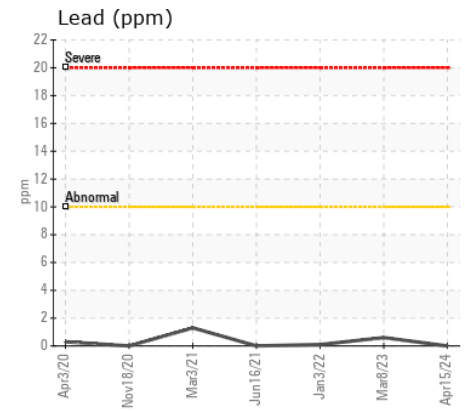
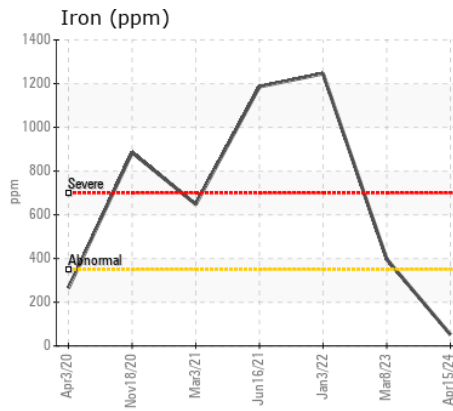
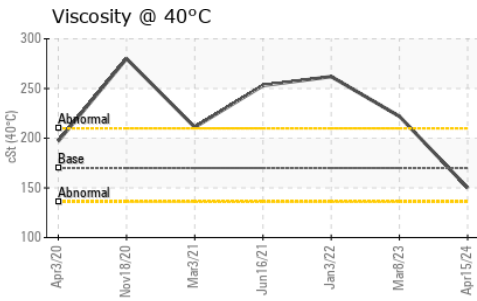
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>15	11	3	2
Potassium	ppm	ASTM D5185m	>20	2	0	0
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	▲ 0.2%

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		0	2	2
Boron	ppm	ASTM D5185m	0	10	0	0
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	4	<1	<1
Manganese	ppm	ASTM D5185m	0	<1	5	11
Magnesium	ppm	ASTM D5185m	<1	65	6	<1
Calcium	ppm	ASTM D5185m	<1	143	30	4
Phosphorus	ppm	ASTM D5185m	2143	466	2205	2192
Zinc	ppm	ASTM D5185m	<1	57	<1	6
Sulfur	ppm	ASTM D5185m	23468	16269	25056	25314
Visc @ 40°C	cSt	ASTM D445	170	150	222	262



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DJJ0017752
Lab Number : 06154945
Unique Number : 10990368
Test Package : MOBCE

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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