

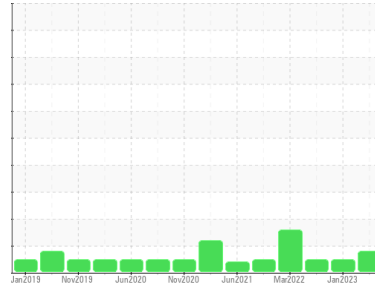


PROBLEM SUMMARY



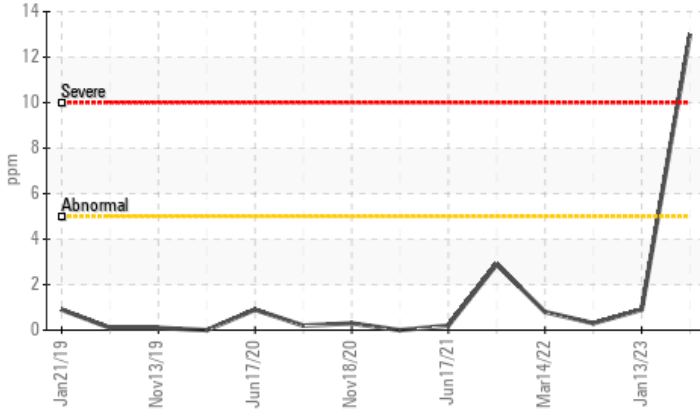
Area
RMR-Louisville
 Machine Id
LIEBHERR LH50M 102200-1216
 Component
Swing Drive
 Fluid
LIEBHERR GEAR BASIC 90 LS (--- GAL)

Sample Rating Trend



COMPONENT CONDITION SUMMARY

▲ Aluminum (ppm)



RECOMMENDATION

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

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	NORMAL	NORMAL
Aluminum	ppm	ASTM D5185m	>5	▲ 13	<1	<1

Customer Id: RIVLOU
 Sample No.: DJJ0017931
 Lab Number: 05969271
 Test Package: MOBCE



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Sean Felton +1 919-379-4092
sfelton@wearcheckusa.com

To change component or sample information:
 Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

13 Jan 2023 Diag: Jonathan Hester

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

view report



15 Sep 2022 Diag: Don Baldrige

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

view report



14 Mar 2022 Diag: Jonathan Hester

WEAR



No corrective action is recommended at this time. Resample at the next service interval to monitor. Bearing and/or bushing wear is indicated. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

view report



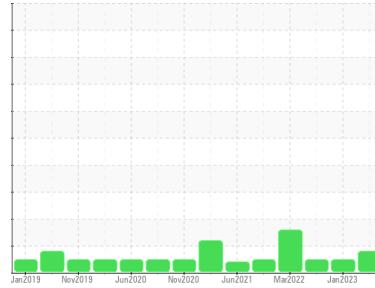


OIL ANALYSIS REPORT



Area
RMR-Louisville
 Machine Id
LIEBHERR LH50M 102200-1216
 Component
Swing Drive
 Fluid
LIEBHERR GEAR BASIC 90 LS (--- GAL)

Sample Rating Trend



WEAR



DIAGNOSIS

Recommendation

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

Wear

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

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

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

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		DJJ0017931	DJJ0015915	DJJ0015980
Sample Date	Client Info		02 May 2023	13 Jan 2023	15 Sep 2022
Machine Age	hrs	Client Info	11663	11118	10624
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		Not Chngd	Changed	Not Chngd
Sample Status			ABNORMAL	NORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >1200	460	153	107
Chromium	ppm	ASTM D5185m >15	5	<1	<1
Nickel	ppm	ASTM D5185m >5	<1	<1	0
Titanium	ppm	ASTM D5185m >5	0	0	<1
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >5	▲ 13	<1	<1
Lead	ppm	ASTM D5185m >8	0	3	<1
Copper	ppm	ASTM D5185m >325	102	238	173
Tin	ppm	ASTM D5185m >15	4	16	13
Vanadium	ppm	ASTM D5185m	0	0	<1
Cadmium	ppm	ASTM D5185m	0	0	<1

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	0	<1	2
Barium	ppm	ASTM D5185m 0	0	10	0
Molybdenum	ppm	ASTM D5185m 0	0	<1	<1
Manganese	ppm	ASTM D5185m 0	4	1	1
Magnesium	ppm	ASTM D5185m <1	0	4	8
Calcium	ppm	ASTM D5185m <1	29	22	25
Phosphorus	ppm	ASTM D5185m 2143	2254	1969	2188
Zinc	ppm	ASTM D5185m <1	0	49	28
Sulfur	ppm	ASTM D5185m 23468	34399	25056	37290

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >10	1	2	2
Sodium	ppm	ASTM D5185m	<1	2	2
Potassium	ppm	ASTM D5185m >20	0	0	<1

VISUAL

	method	limit/base	current	history1	history2
White Metal	scalar	*Visual NONE	NONE	NONE	MODER
Yellow Metal	scalar	*Visual NONE	NONE	MODER	NONE
Precipitate	scalar	*Visual NONE	NONE	NONE	NONE
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
Free Water	scalar	*Visual	NEG	NEG	NEG

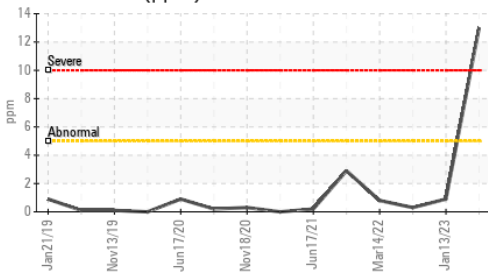
FLUID PROPERTIES

	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 170	203	166	176



OIL ANALYSIS REPORT

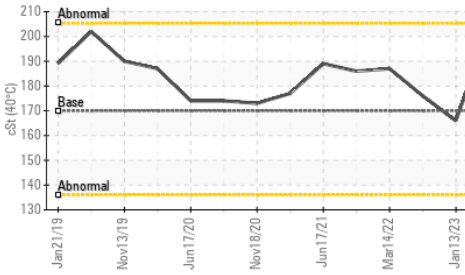
▲ Aluminum (ppm)



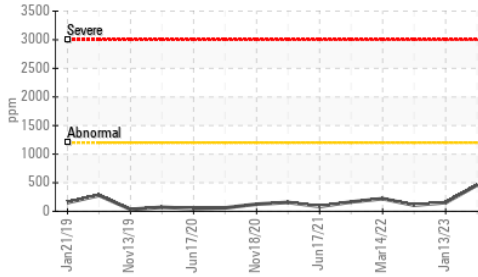
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color			no image	no image	no image
Bottom			no image	no image	no image

GRAPHS

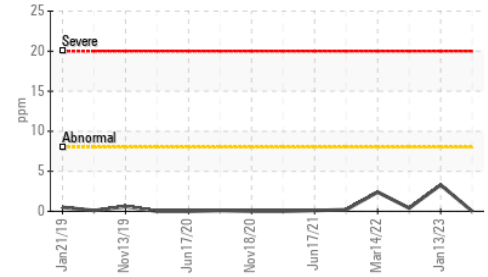
Viscosity @ 40°C



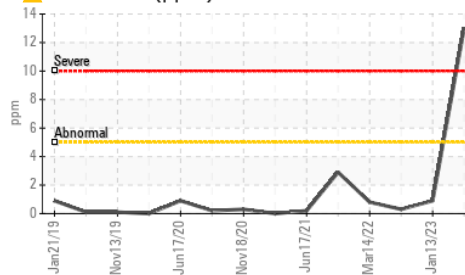
Iron (ppm)



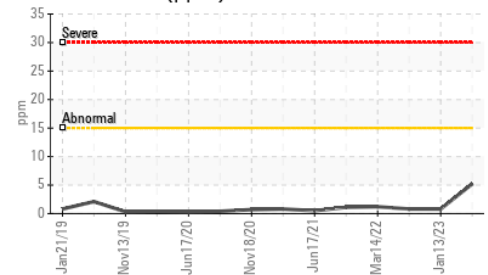
Lead (ppm)



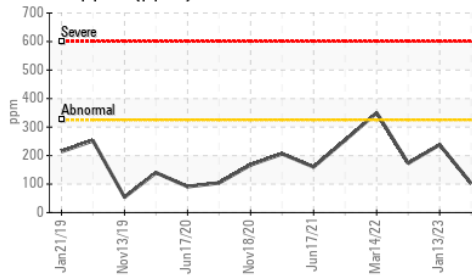
▲ Aluminum (ppm)



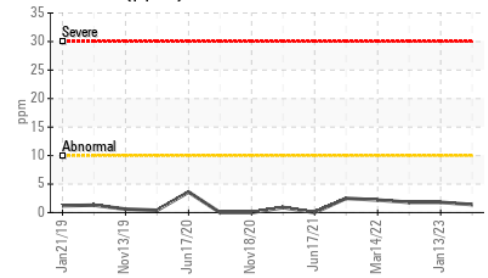
Chromium (ppm)



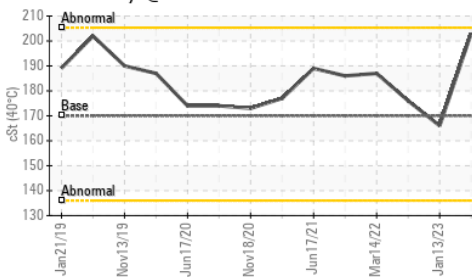
Copper (ppm)



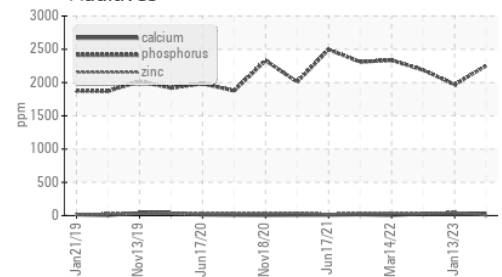
Silicon (ppm)



Viscosity @ 40°C



Additives



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DJJ0017931 **Received** : 04 Oct 2023
Lab Number : 05969271 **Diagnosed** : 06 Oct 2023
Unique Number : 10675822 **Diagnostician** : Sean Felton
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)

T:
 F: (502)587-8699