



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>ABNORMAL</b>
FLUID CONDITION	<b>NORMAL</b>



Area  
**RMR-Newport**  
Machine Id  
**1203-88007 LIEBHERR LH50M 1203-88007**  
Component  
**Swing Drive**  
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		<b>DJJ0018093</b>	DJJ0016419	DJJ0011547
Sample Date		Client Info		<b>14 Jun 2024</b>	19 Jul 2022	03 Mar 2022
Machine Age	hrs	Client Info		<b>12052</b>	9816	9251
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	Changed	Not Changd
Filter Changed		Client Info		<b>N/A</b>	Changed	Changed
Sample Status				<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>1200	<b>560</b>	961	671
Chromium	ppm	ASTM D5185m	>15	<b>3</b>	10	6
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	3
Aluminum	ppm	ASTM D5185m	>5	<b>2</b>	2	1
Lead	ppm	ASTM D5185m	>8	<b>&lt;1</b>	<1	2
Copper	ppm	ASTM D5185m	>325	<b>96</b>	211	152
Tin	ppm	ASTM D5185m	>15	<b>9</b>	9	6
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	MODER	NONE

## CONTAMINATION

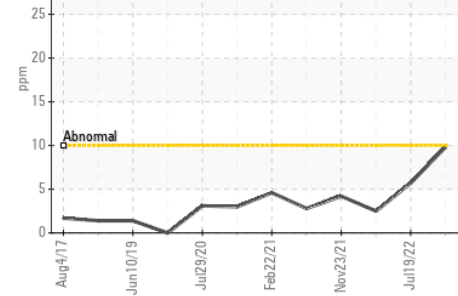
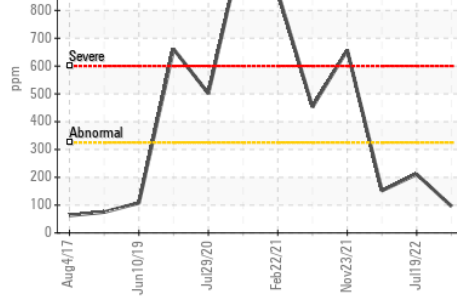
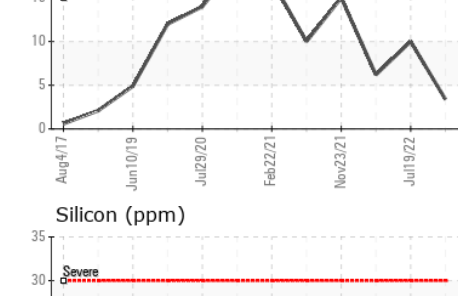
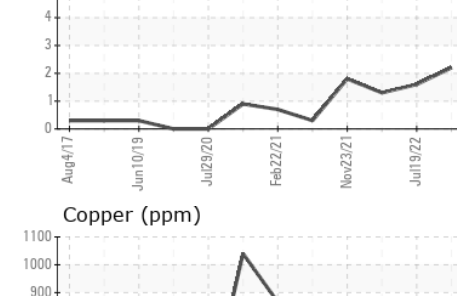
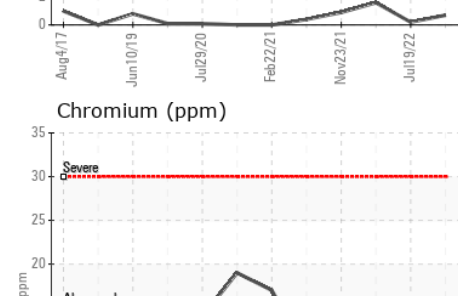
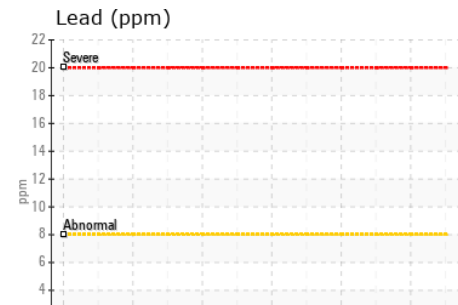
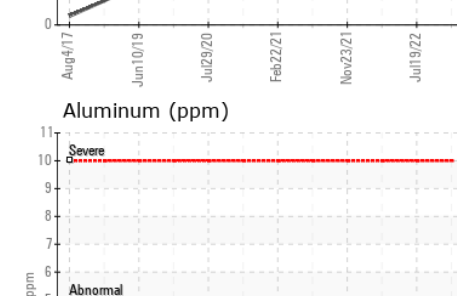
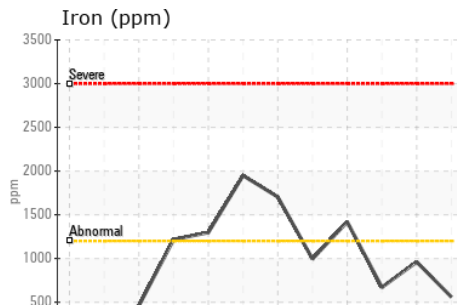
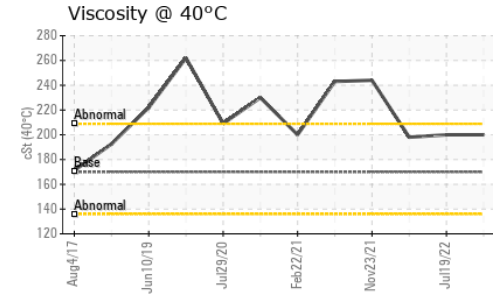
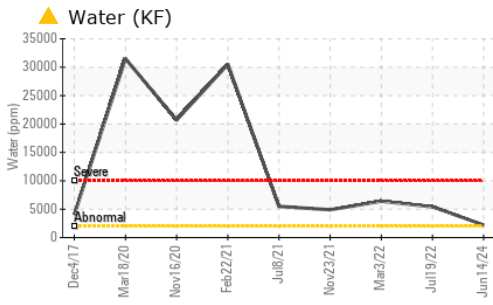
There is a light concentration of water present in the oil.

Silicon	ppm	ASTM D5185m	>10	<b>10</b>	6	2
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	1	0
Water	%	ASTM D6304	>0.2	<b>▲ 0.221</b>	▲ 0.542	▲ 0.641
ppm Water	ppm	ASTM D6304	>2000	<b>▲ 2210</b>	▲ 5420	▲ 6410
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>▲ 0.2%</b>	▲ 0.2%	▲ 0.2%

## FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		<b>3</b>	3	3
Boron	ppm	ASTM D5185m	0	<b>4</b>	4	13
Barium	ppm	ASTM D5185m	0	<b>14</b>	0	0
Molybdenum	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	<1
Manganese	ppm	ASTM D5185m	0	<b>5</b>	8	6
Magnesium	ppm	ASTM D5185m	<1	<b>2</b>	4	4
Calcium	ppm	ASTM D5185m	<1	<b>11</b>	27	28
Phosphorus	ppm	ASTM D5185m	2143	<b>2235</b>	2057	2383
Zinc	ppm	ASTM D5185m	<1	<b>140</b>	50	31
Sulfur	ppm	ASTM D5185m	23468	<b>27664</b>	35152	25056
Visc @ 40°C	cSt	ASTM D445	170	<b>200</b>	200	198



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : DJJ0018093 **Received** : 19 Jun 2024  
**Lab Number** : 06215163 **Tested** : 20 Jun 2024  
**Unique Number** : 11088027 **Diagnosed** : 21 Jun 2024 - Sean Felton  
**Test Package** : MOBCE ( Additional Tests: KF )

**RIVER METALS RECYCLING - NEWPORT**  
P.O. BOX 72-220  
NEWPORT, KY  
US 41072  
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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