



# 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  
**Hydraulic System**  
Fluid  
**MV 46 (--- GAL)**

## RECOMMENDATION

We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>DJJ0018097</b>	DJJ0016426	DJJ0016413
Sample Date		Client Info		<b>14 Jun 2024</b>	05 Dec 2022	19 Jul 2022
Machine Age	hrs	Client Info		<b>12052</b>	10444	9816
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>Not Changd</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>N/A</b>	Not Changd	Changed
Sample Status				<b>ABNORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>60	<b>7</b>	4	2
Chromium	ppm	ASTM D5185m	>40	<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m	>5	<b>2</b>	<1	0
Lead	ppm	ASTM D5185m	>5	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185m	>5	<b>0</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

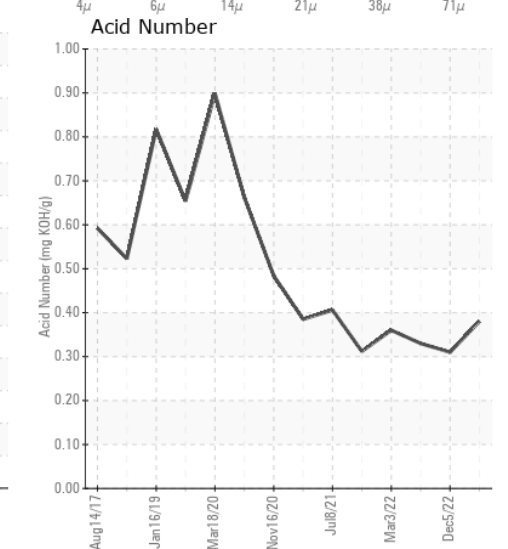
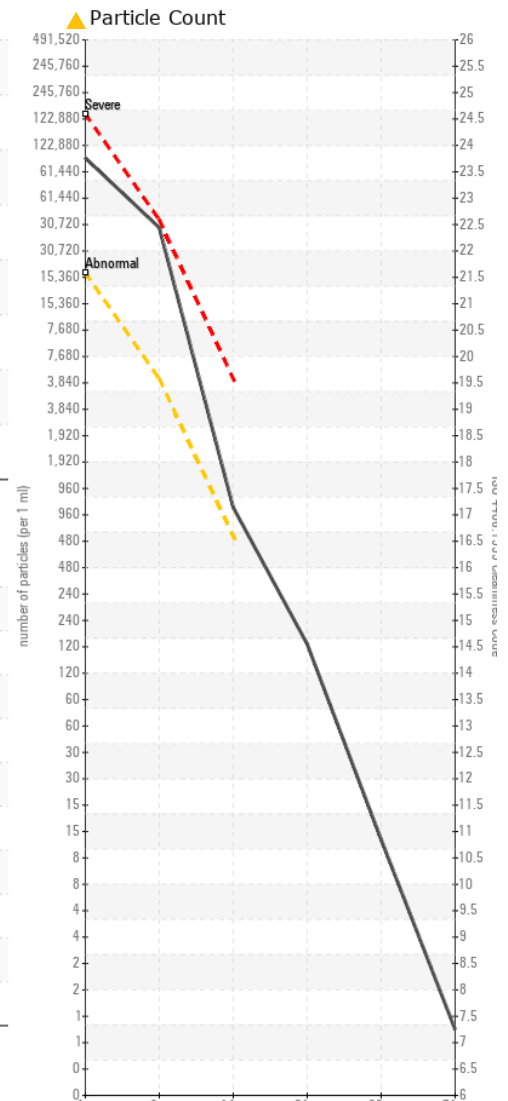
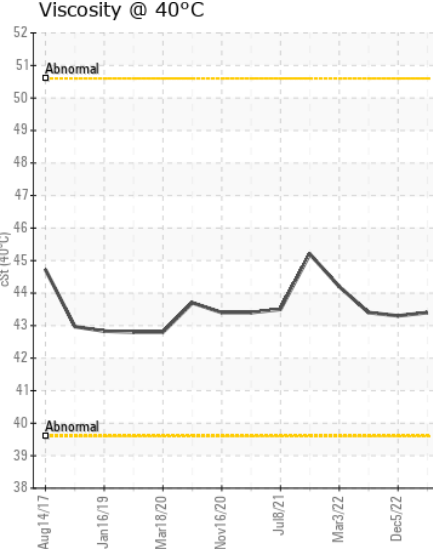
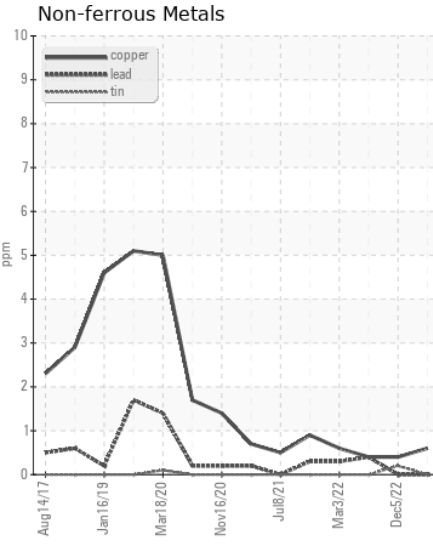
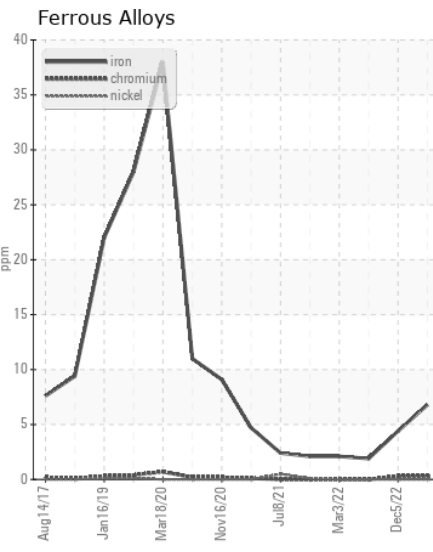
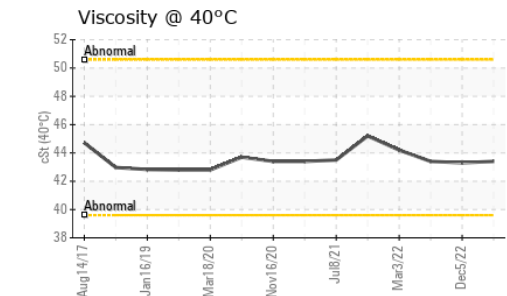
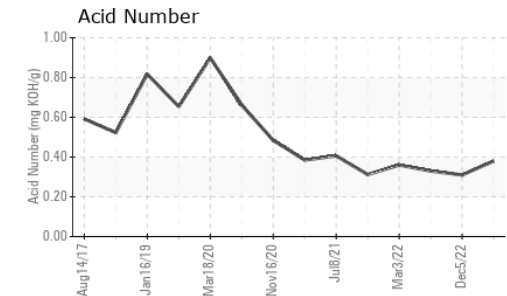
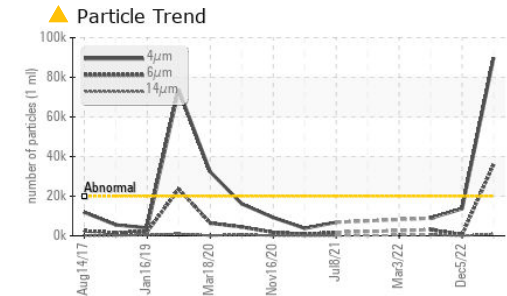
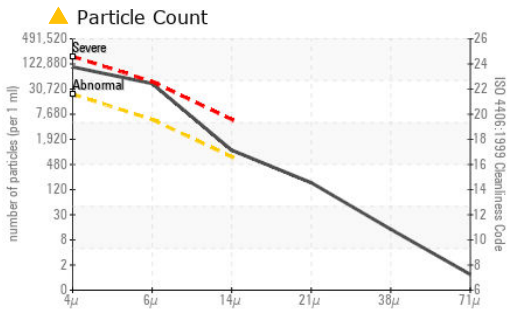
There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	<1
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	<1	6
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>20000	<b>▲ 89847</b>	13690	8900
Particles >6µm		ASTM D7647	>5000	<b>▲ 36041</b>	532	3079
Particles >14µm		ASTM D7647	>640	<b>● 927</b>	25	455
Particles >21µm		ASTM D7647	>160	<b>155</b>	6	127
Particles >38µm		ASTM D7647	>40	<b>12</b>	0	15
Particles >71µm		ASTM D7647	>10	<b>1</b>	0	2
Oil Cleanliness		ISO 4406 (c)	>21/19/16	<b>▲ 24/22/17</b>	21/16/12	20/19/16
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>LIGHT</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	>0.1	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Sodium	ppm	ASTM D5185m		<b>0</b>	0	2
Boron	ppm	ASTM D5185m		<b>2</b>	2	3
Barium	ppm	ASTM D5185m		<b>0</b>	1	0
Molybdenum	ppm	ASTM D5185m		<b>2</b>	4	2
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	0
Magnesium	ppm	ASTM D5185m		<b>9</b>	14	13
Calcium	ppm	ASTM D5185m		<b>89</b>	91	65
Phosphorus	ppm	ASTM D5185m		<b>342</b>	334	307
Zinc	ppm	ASTM D5185m		<b>469</b>	444	338
Sulfur	ppm	ASTM D5185m		<b>903</b>	910	821
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.38</b>	0.31	0.33
Visc @ 40°C	cSt	ASTM D445		<b>43.4</b>	43.3	43.4



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : DJJ0018097  
**Lab Number** : 06214601  
**Unique Number** : 11087465  
**Test Package** : MOBCE  
**Received** : 19 Jun 2024  
**Tested** : 20 Jun 2024  
**Diagnosed** : 20 Jun 2024 - Wes Davis

**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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