



# OIL ANALYSIS REPORT

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



Area  
**RMR-Trinity**  
 Machine Id  
**1216-96585 LIEBHERR LH50M 1216-96585**  
 Component  
**Hydraulic System**  
 Fluid  
**AW HYDRAULIC OIL ISO 46 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>DJJ0022459</b>	DJJ0019877	DJJ0010670
Sample Date		Client Info		<b>12 Apr 2024</b>	20 Jul 2023	03 Mar 2023
Machine Age	hrs	Client Info		<b>11651</b>	10527	10023
Oil Age	hrs	Client Info		<b>0</b>	0	250
Filter Age	hrs	Client Info		<b>0</b>	0	250
Oil Changed		Client Info		<b>Changed</b>	Not Changd	N/A
Filter Changed		Client Info		<b>Changed</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>60	<b>5</b>	4	2
Chromium	ppm	ASTM D5185m	>40	<b>2</b>	<1	<1
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>	0	0
Aluminum	ppm	ASTM D5185m	>5	<b>0</b>	0	<1
Lead	ppm	ASTM D5185m	>5	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m	>15	<b>1</b>	2	<1
Tin	ppm	ASTM D5185m	>5	<b>0</b>	0	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

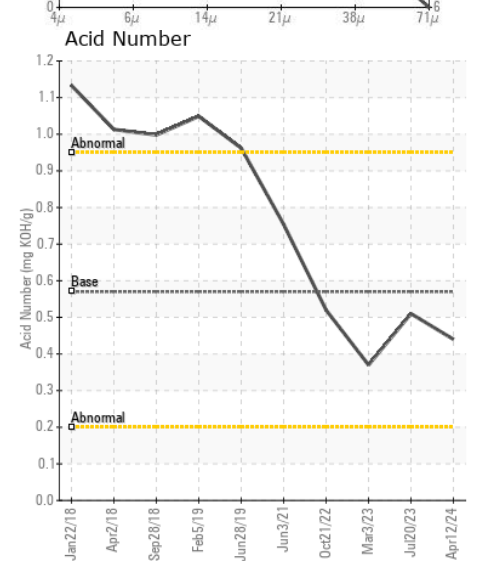
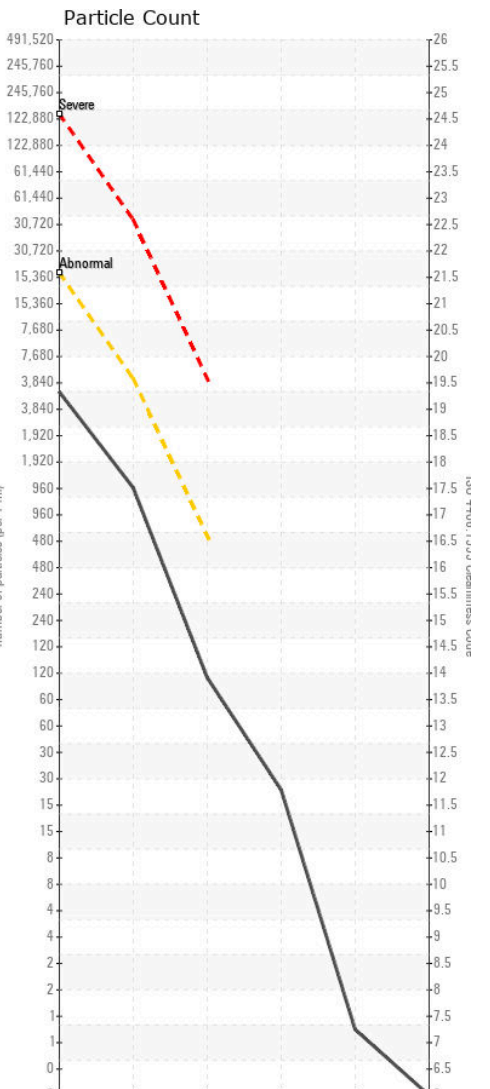
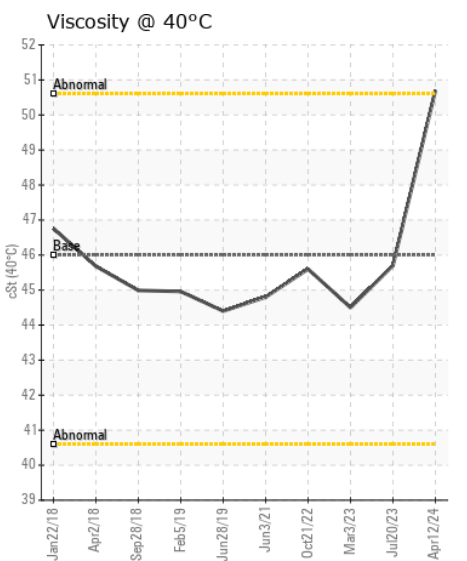
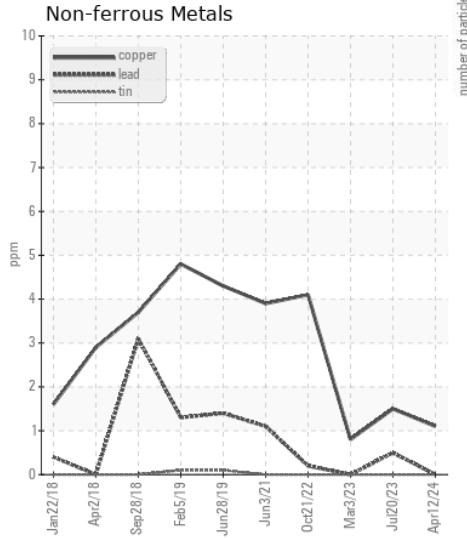
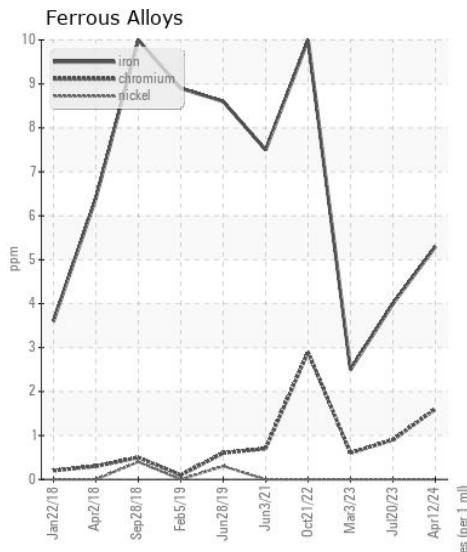
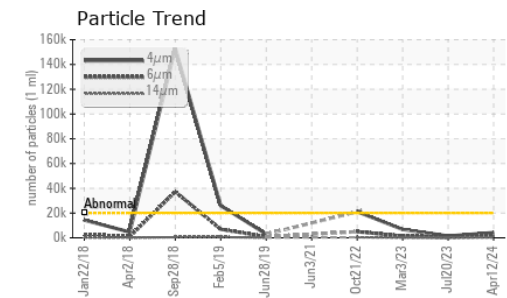
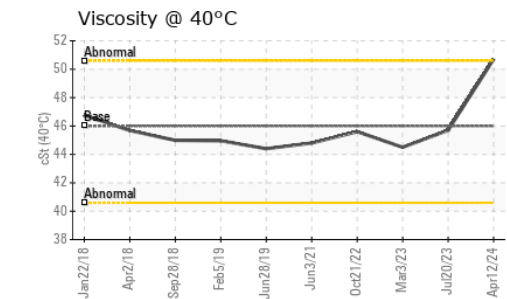
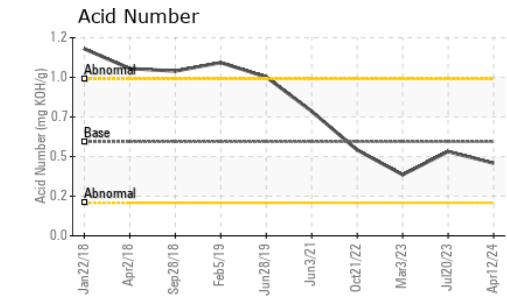
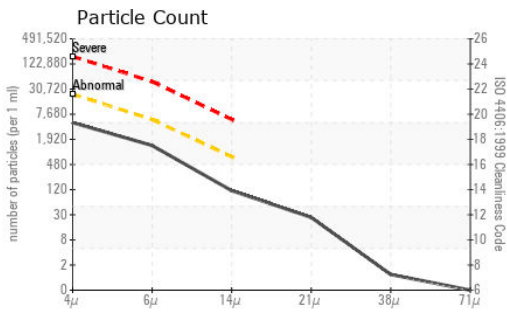
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	1
Potassium	ppm	ASTM D5185m	>20	<b>11</b>	<1	0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>20000	<b>4210</b>	1464	6773
Particles >6µm		ASTM D7647	>5000	<b>1197</b>	442	1419
Particles >14µm		ASTM D7647	>640	<b>100</b>	39	56
Particles >21µm		ASTM D7647	>160	<b>23</b>	11	16
Particles >38µm		ASTM D7647	>40	<b>1</b>	1	2
Particles >71µm		ASTM D7647	>10	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>21/19/16	<b>19/17/14</b>	18/16/12	20/18/13
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>LIGHT</b>	NONE	VLITE
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 condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>3</b>	0	<1
Boron	ppm	ASTM D5185m	5	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	5	<b>0</b>	1	0
Molybdenum	ppm	ASTM D5185m	5	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m	25	<b>0</b>	<1	6
Calcium	ppm	ASTM D5185m	200	<b>56</b>	98	158
Phosphorus	ppm	ASTM D5185m	300	<b>283</b>	352	555
Zinc	ppm	ASTM D5185m	370	<b>344</b>	459	768
Sulfur	ppm	ASTM D5185m	2500	<b>866</b>	1239	1740
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	<b>0.44</b>	0.51	0.37
Visc @ 40°C	cSt	ASTM D445	46	<b>50.7</b>	45.7	44.5



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : DJJ0022459 **Received** : 17 Apr 2024  
**Lab Number** : 06151916 **Tested** : 18 Apr 2024  
**Unique Number** : 10981994 **Diagnosed** : 19 Apr 2024 - Don Baldrige  
**Test Package** : CONST

**RIVER METALS RECYCLING - DECATUR FACILITY**  
 4301 IVERSON BLVD  
 TRINITY, AL  
 US 35673  
 Contact: LARRY BARBER  
 larry.barber@rmrecycling.com

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)