



# LIEBHERR

## OIL ANALYSIS REPORT

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



Machine Id  
**LIEBHERR LH40M 99052-1215**  
Component  
**Pump Hydraulic System**  
Fluid  
**MOBIL MOBILUBE HD 80W90 (--- 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>LH0071929</b>	LH0173492	---
Sample Date		Client Info		<b>14 May 2024</b>	27 Apr 2023	---
Machine Age	hrs	Client Info		<b>10879</b>	8705	---
Oil Age	hrs	Client Info		<b>0</b>	0	---
Filter Age	hrs	Client Info		<b>0</b>	0	---
Oil Changed		Client Info		<b>N/A</b>	Changed	---
Filter Changed		Client Info		<b>N/A</b>	N/A	---
Sample Status				<b>ABNORMAL</b>	NORMAL	---

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>60	<b>48</b>	19	---
Chromium	ppm	ASTM D5185(m)	>40	<b>2</b>	<1	---
Nickel	ppm	ASTM D5185(m)	>10	<b>0</b>	<1	---
Titanium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	---
Silver	ppm	ASTM D5185(m)		<b>0</b>	0	---
Aluminum	ppm	ASTM D5185(m)	>5	<b>1</b>	<1	---
Lead	ppm	ASTM D5185(m)	>5	<b>0</b>	<1	---
Copper	ppm	ASTM D5185(m)	>15	<b>2</b>	2	---
Tin	ppm	ASTM D5185(m)	>5	<b>0</b>	0	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	---
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	---

### CONTAMINATION

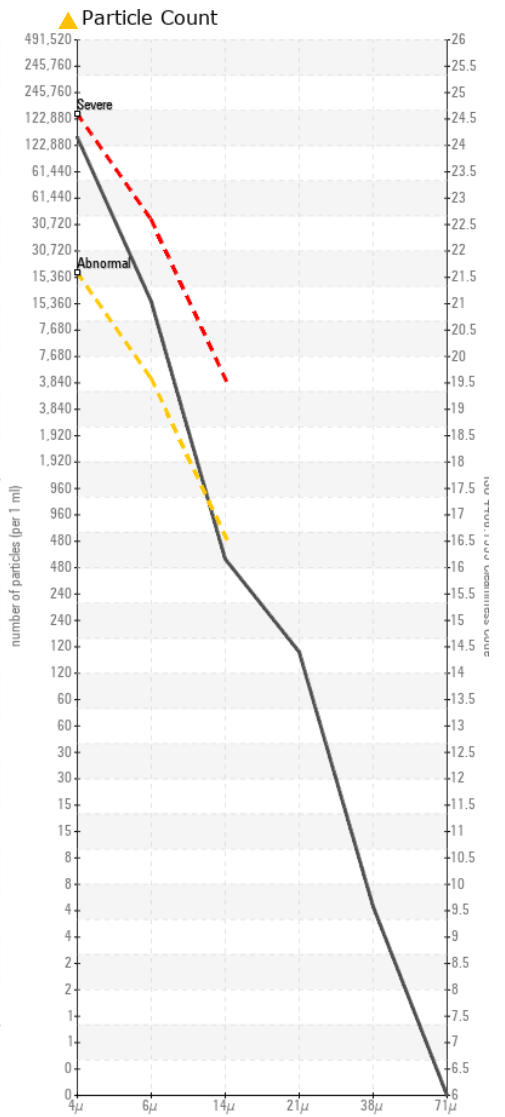
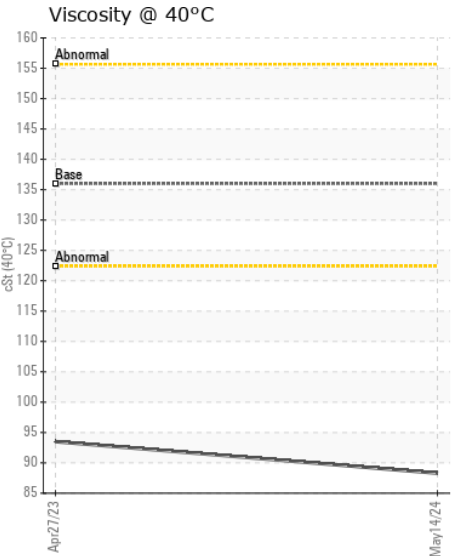
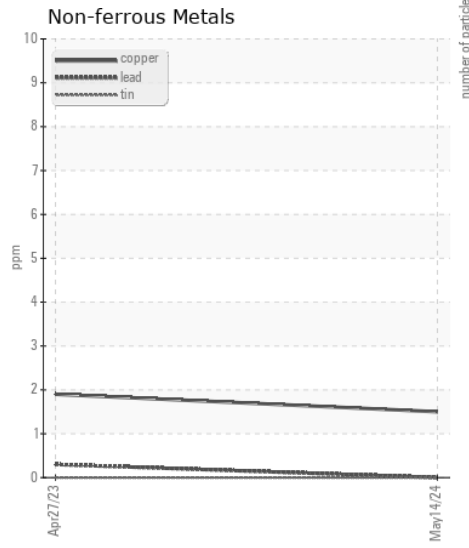
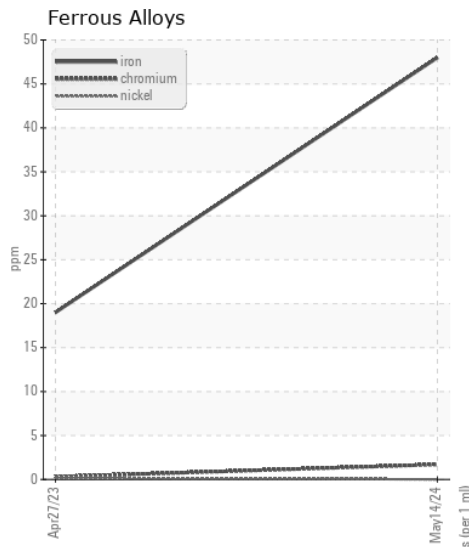
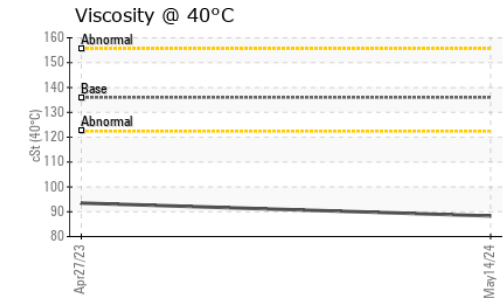
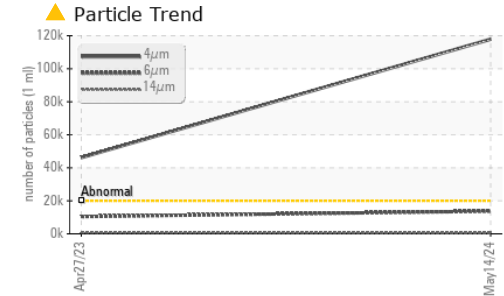
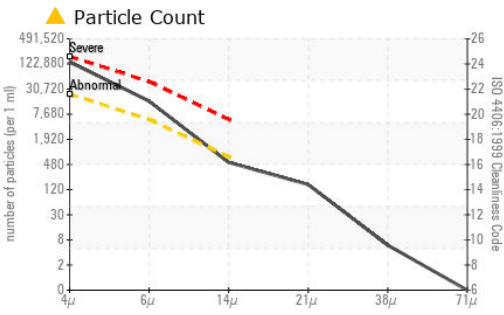
There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185(m)	>15	<b>4</b>	3	---
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	2	---
Water		WC Method	>0.1	<b>NEG</b>	NEG	---
Particles >4µm		ASTM D7647	>20000	<b>▲ 117880</b>	46154	---
Particles >6µm		ASTM D7647	>5000	<b>▲ 13712</b>	10443	---
Particles >14µm		ASTM D7647	>640	<b>472</b>	768	---
Particles >21µm		ASTM D7647	>160	<b>140</b>	163	---
Particles >38µm		ASTM D7647	>40	<b>5</b>	2	---
Particles >71µm		ASTM D7647	>10	<b>0</b>	0	---
Oil Cleanliness		ISO 4406 (c)	>21/19/16	<b>▲ 24/21/16</b>	23/21/17	---
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	Visual*	NORML	<b>NORML</b>	NORML	---
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	Visual*	>0.1	<b>NEG</b>	NEG	---

### FLUID CONDITION

Viscosity of sample indicates oil is within SAE 80 range, advise investigate. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Sodium	ppm	ASTM D5185(m)		<b>18</b>	47	---
Boron	ppm	ASTM D5185(m)		<b>105</b>	116	---
Barium	ppm	ASTM D5185(m)		<b>4</b>	10	---
Molybdenum	ppm	ASTM D5185(m)		<b>0</b>	<1	---
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185(m)		<b>4</b>	3	---
Calcium	ppm	ASTM D5185(m)		<b>79</b>	38	---
Phosphorus	ppm	ASTM D5185(m)		<b>842</b>	1157	---
Zinc	ppm	ASTM D5185(m)		<b>218</b>	104	---
Sulfur	ppm	ASTM D5185(m)		<b>16604</b>	18002	---
Visc @ 40°C	cSt	ASTM D7279(m)	136	<b>88.3</b>	93.5	---



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : LH0071929 **Received** : 03 Jun 2024  
**Lab Number** : 02639443 **Tested** : 04 Jun 2024  
**Unique Number** : 5788605 **Diagnosed** : 05 Jun 2024 - Kevin Marson  
**Test Package** : MOB 1 ( Additional Tests: PrtCount )

**KEN'S SALVAGE CO. LTD.**  
 310 ALLANBURG ROAD  
 THOROLD, ON  
 CA L2V 1A4  
 Contact: Jake Martin  
 Jake@kenssalvage.com  
 T: (905)680-2323  
 F: (905)680-4447

To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.