



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
(370846)
Machine Id
LIEBHERR R938 052202-1650
Component
Hydraulic System
Fluid
LIEBHERR HYDRAULIC 36 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0290715	LH0227113	---
Sample Date		Client Info		14 Jun 2024	19 Apr 2022	---
Machine Age	hrs	Client Info		3617	0	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Not Changd	N/A	---
Filter Changed		Client Info		N/A	Changed	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>50	12	6	---
Chromium	ppm	ASTM D5185(m)	>15	<1	<1	---
Nickel	ppm	ASTM D5185(m)	>5	<1	<1	---
Titanium	ppm	ASTM D5185(m)		0	0	---
Silver	ppm	ASTM D5185(m)		0	0	---
Aluminum	ppm	ASTM D5185(m)	>8	<1	<1	---
Lead	ppm	ASTM D5185(m)	>5	<1	<1	---
Copper	ppm	ASTM D5185(m)	>15	6	4	---
Tin	ppm	ASTM D5185(m)	>5	0	0	---
Vanadium	ppm	ASTM D5185(m)		0	0	---
White Metal	scalar	Visual*	NONE	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	---

CONTAMINATION

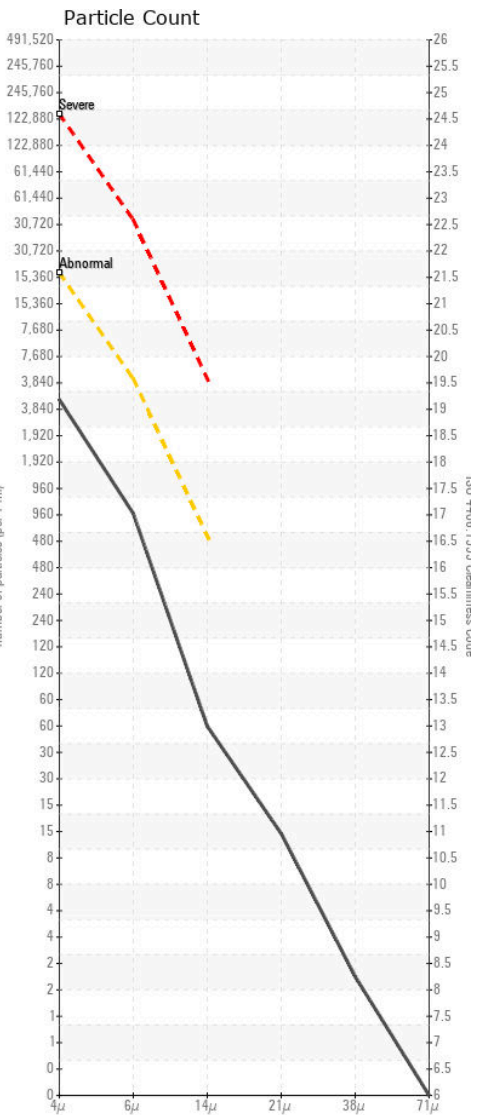
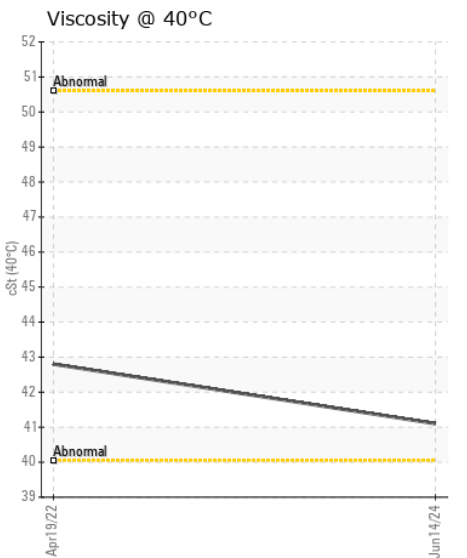
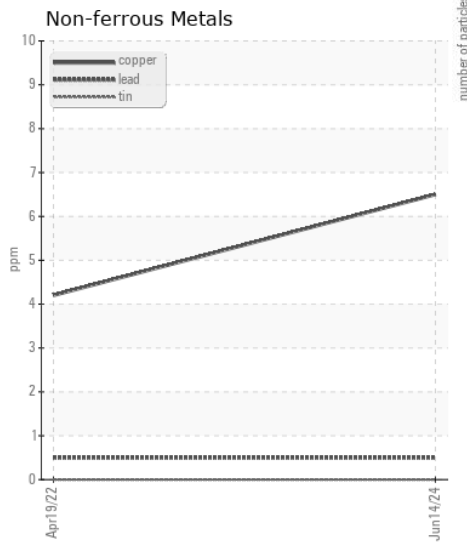
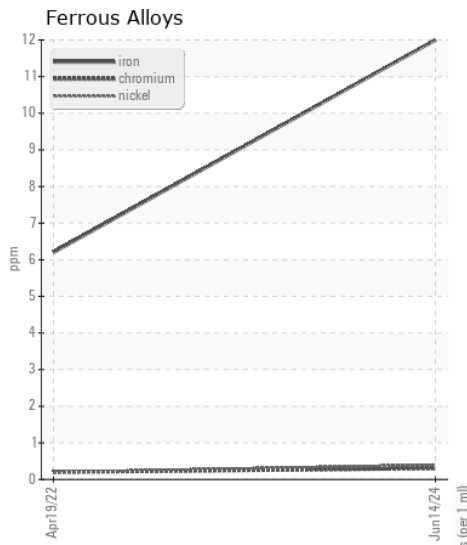
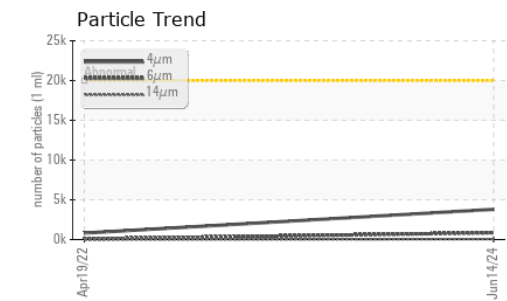
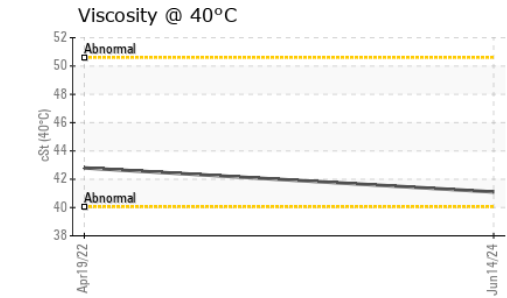
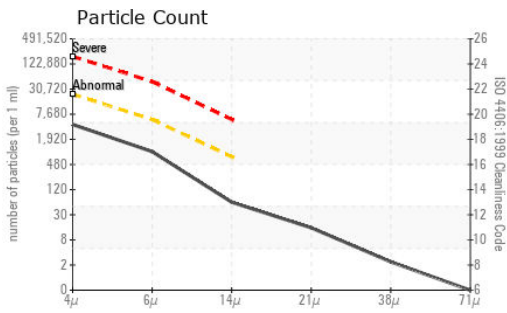
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185(m)	>25	4	4	---
Potassium	ppm	ASTM D5185(m)	>20	<1	1	---
Water		WC Method	>0.1	NEG	NEG	---
Particles >4µm		ASTM D7647	>20000	3804	817	---
Particles >6µm		ASTM D7647	>5000	856	67	---
Particles >14µm		ASTM D7647	>640	53	5	---
Particles >21µm		ASTM D7647	>160	13	1	---
Particles >38µm		ASTM D7647	>40	2	0	---
Particles >71µm		ASTM D7647	>10	0	0	---
Oil Cleanliness		ISO 4406 (c)	>21/19/16	19/17/13	17/13/10	---
Silt	scalar	Visual*	NONE	NONE	NONE	---
Debris	scalar	Visual*	NONE	NONE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	---
Appearance	scalar	Visual*	NORML	NORML	NORML	---
Odor	scalar	Visual*	NORML	NORML	NORML	---
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	---

FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		3	2	---
Boron	ppm	ASTM D5185(m)		<1	<1	---
Barium	ppm	ASTM D5185(m)		<1	0	---
Molybdenum	ppm	ASTM D5185(m)		0	0	---
Manganese	ppm	ASTM D5185(m)		<1	<1	---
Magnesium	ppm	ASTM D5185(m)		5	4	---
Calcium	ppm	ASTM D5185(m)		1085	1380	---
Phosphorus	ppm	ASTM D5185(m)		583	657	---
Zinc	ppm	ASTM D5185(m)		684	711	---
Sulfur	ppm	ASTM D5185(m)		3645	4387	---
Visc @ 40°C	cSt	ASTM D7279(m)		41.1	42.8	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0290715 **Received** : 24 Jun 2024
Lab Number : 02643764 **Tested** : 25 Jun 2024
Unique Number : 5801303 **Diagnosed** : 25 Jun 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: PrtCount)

EQUIPMENT ST-ARNEAULT
 350 RANG SUD
 STE-GENEVIEVE-DE-BATISCAN, QC
 CA G0X 1A0
 Contact: Service Manager

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.

T:
F: