



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
TMR-Riviera Beach
 Machine Id
493144 LIEBHERR LH50 119559
 Component
Hydraulic System
 Fluid
AMALIE 68W (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DJJ0023227	DJJ0008319	---
Sample Date		Client Info		08 Jul 2024	04 Oct 2022	---
Machine Age	hrs	Client Info		9235	0	---
Oil Age	hrs	Client Info		500	0	---
Filter Age	hrs	Client Info		500	0	---
Oil Changed		Client Info		Changed	N/A	---
Filter Changed		Client Info		Changed	N/A	---
Sample Status				NORMAL	SEVERE	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	23	▲ 155	---
Chromium	ppm	ASTM D5185m	>5	<1	<1	---
Nickel	ppm	ASTM D5185m	>2	<1	<1	---
Titanium	ppm	ASTM D5185m		<1	0	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m	>2	2	2	---
Lead	ppm	ASTM D5185m	>4	<1	0	---
Copper	ppm	ASTM D5185m	>10	2	5	---
Tin	ppm	ASTM D5185m	>2	<1	0	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

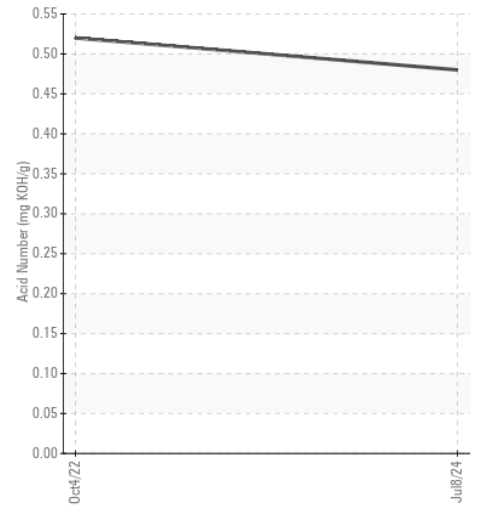
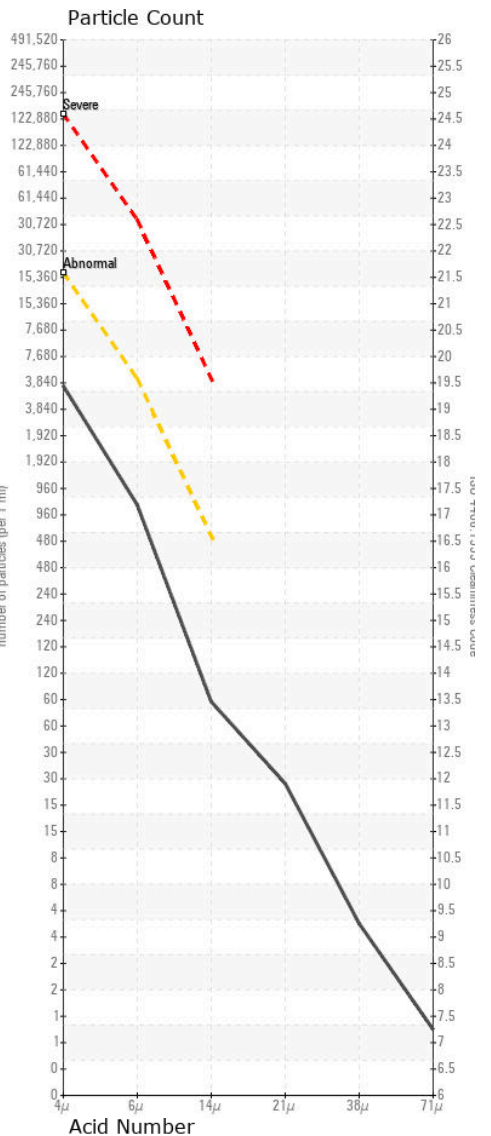
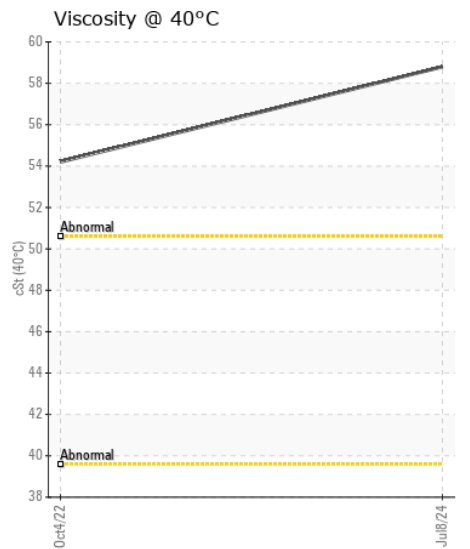
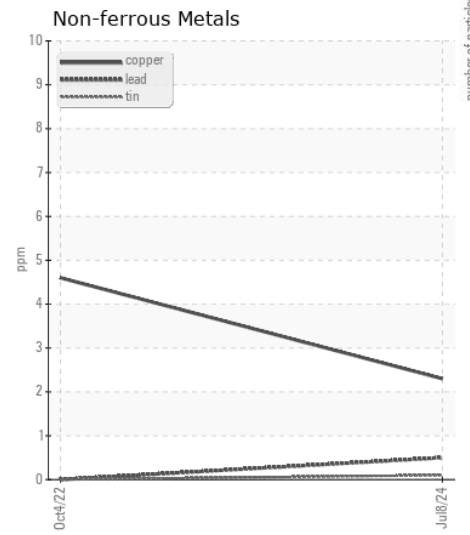
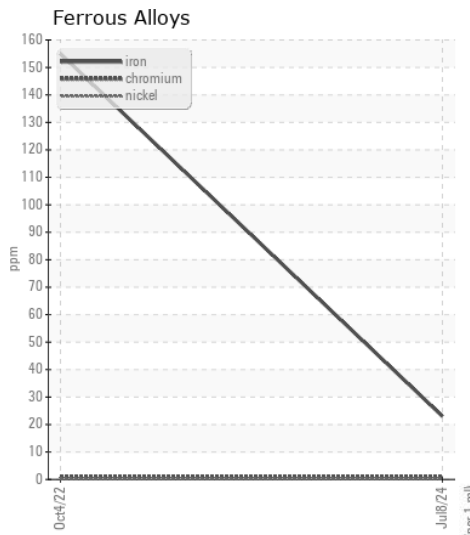
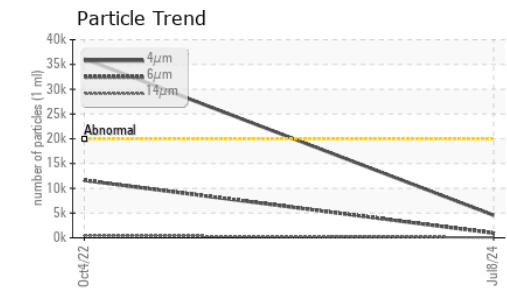
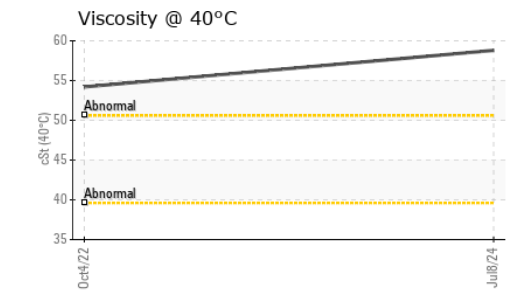
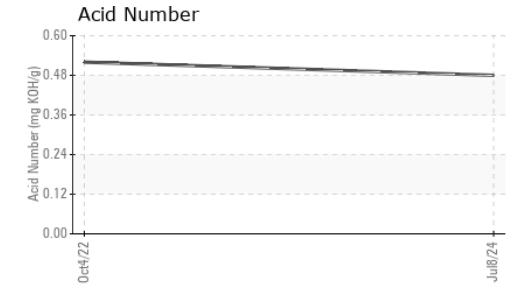
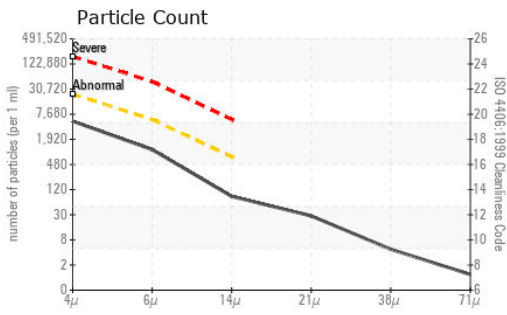
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>17	2	4	---
Potassium	ppm	ASTM D5185m	>20	2	0	---
Water		WC Method	>0.1	NEG	NEG	---
Particles >4µm		ASTM D7647	>20000	4555	▲ 36151	---
Particles >6µm		ASTM D7647	>5000	958	▲ 11599	---
Particles >14µm		ASTM D7647	>640	73	468	---
Particles >21µm		ASTM D7647	>160	25	54	---
Particles >38µm		ASTM D7647	>40	4	2	---
Particles >71µm		ASTM D7647	>10	1	0	---
Oil Cleanliness		ISO 4406 (c)	>21/19/16	19/17/13	▲ 22/21/16	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	VLITE	---
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 AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<1	3	---
Boron	ppm	ASTM D5185m		4	7	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		4	4	---
Manganese	ppm	ASTM D5185m		<1	2	---
Magnesium	ppm	ASTM D5185m		23	20	---
Calcium	ppm	ASTM D5185m		301	487	---
Phosphorus	ppm	ASTM D5185m		370	445	---
Zinc	ppm	ASTM D5185m		471	541	---
Sulfur	ppm	ASTM D5185m		1134	2799	---
Acid Number (AN)	mg KOH/g	ASTM D8045		0.48	0.52	---
Visc @ 40°C	cSt	ASTM D445		58.8	54.2	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DJJ0023227
Lab Number : 06235859
Unique Number : 11124693
Test Package : CONST

Received : 15 Jul 2024
Tested : 16 Jul 2024
Diagnosed : 16 Jul 2024 - Wes Davis

TRADEMARK METALS RECYCLING - RIVIERA BEACH
 4661 DYER BLVD
 WEST PALM BEACH, FL
 US 33407
 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)

T:
 F: (561)842-9526