



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR LH40M 1215-124371
Component
Swing Drive
Fluid
GEAR OIL SAE 80W90 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0204759	LH0213417	---
Sample Date		Client Info		06 Sep 2022	24 Feb 2022	---
Machine Age	hrs	Client Info		1949	1033	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Not Changed	Changed	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>350	60	355	---
Chromium	ppm	ASTM D5185m	>15	<1	2	---
Nickel	ppm	ASTM D5185m	>5	<1	0	---
Titanium	ppm	ASTM D5185m		0	<1	---
Silver	ppm	ASTM D5185m		<1	0	---
Aluminum	ppm	ASTM D5185m	>5	1	0	---
Lead	ppm	ASTM D5185m	>10	<1	<1	---
Copper	ppm	ASTM D5185m	>300	67	82	---
Tin	ppm	ASTM D5185m	>15	4	3	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	LIGHT	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

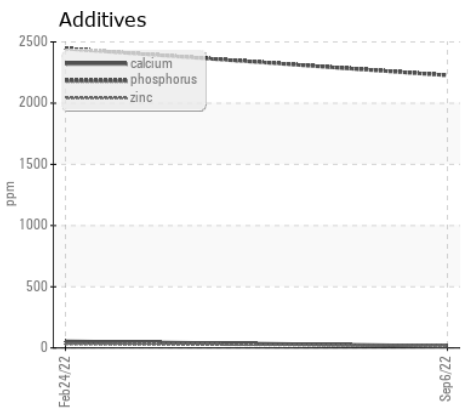
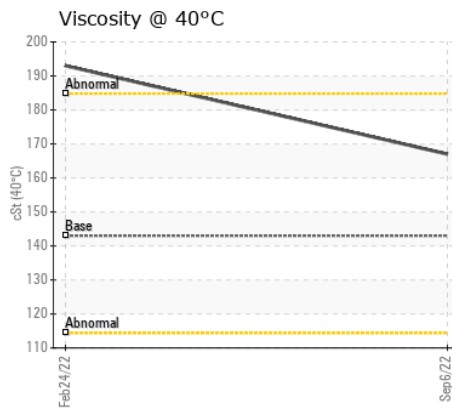
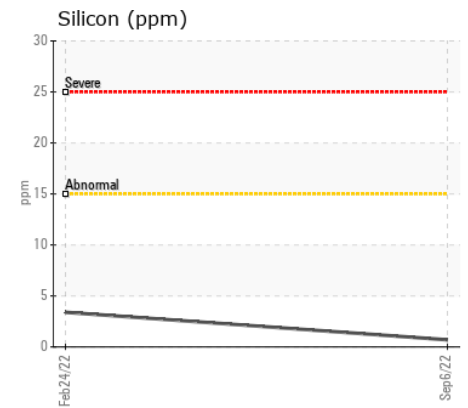
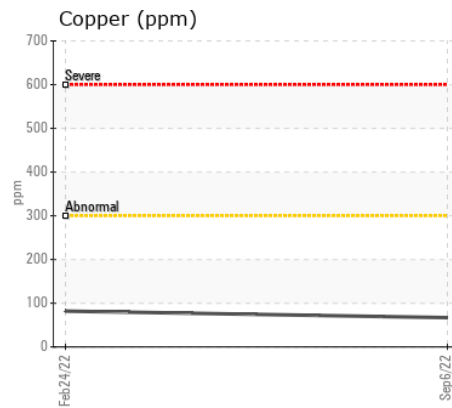
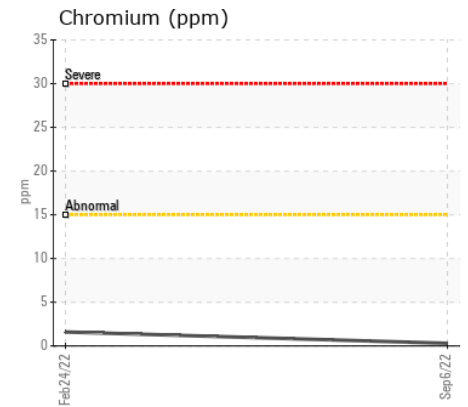
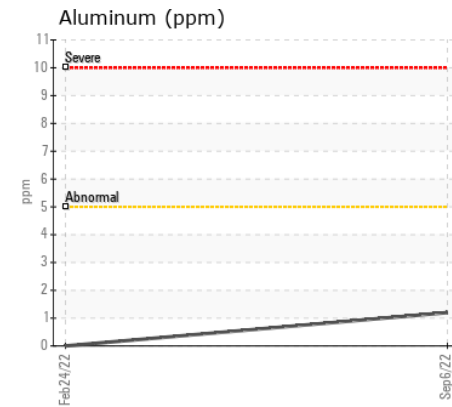
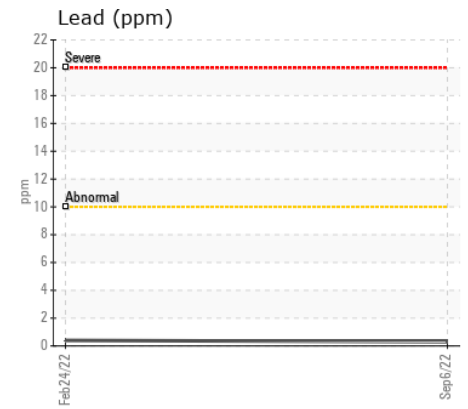
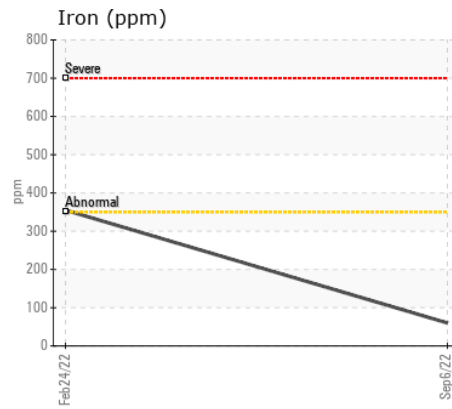
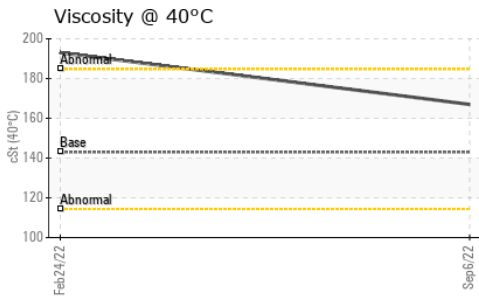
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>15	<1	3	---
Potassium	ppm	ASTM D5185m	>20	0	2	---
Water		WC Method	>0.2	NEG	NEG	---
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	>0.2	NEG	NEG	---

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m	>170	2	5	---
Boron	ppm	ASTM D5185m	400	14	12	---
Barium	ppm	ASTM D5185m	200	3	9	---
Molybdenum	ppm	ASTM D5185m	12	<1	<1	---
Manganese	ppm	ASTM D5185m		<1	3	---
Magnesium	ppm	ASTM D5185m	12	<1	1	---
Calcium	ppm	ASTM D5185m	150	16	54	---
Phosphorus	ppm	ASTM D5185m	1650	2227	2445	---
Zinc	ppm	ASTM D5185m	125	19	32	---
Sulfur	ppm	ASTM D5185m	22500	25056	22928	---
Visc @ 40°C	cSt	ASTM D445	143	167	193	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LH0204759 **Received** : 13 Sep 2022
Lab Number : 05640526 **Tested** : 14 Sep 2022
Unique Number : 10130056 **Diagnosed** : 15 Sep 2022 - Angela Borella
Test Package : MOBCE

SADOFF IRON AND METAL
 240 ARNDT STREET
 FOND DU LAC, WI
 US 54936
 Contact: DAVE CASPER
 casperd@sadoff.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)

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F: