



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	MARGINAL
FLUID CONDITION	NORMAL

Machine Id
SENNEBOGEN 830E MS17

Component
Transmission (Manual)

Fluid
{not provided} (5 GAL)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

WEAR

All component wear rates are normal.

CONTAMINATION

There is a light concentration of water present in the fluid.

FLUID CONDITION

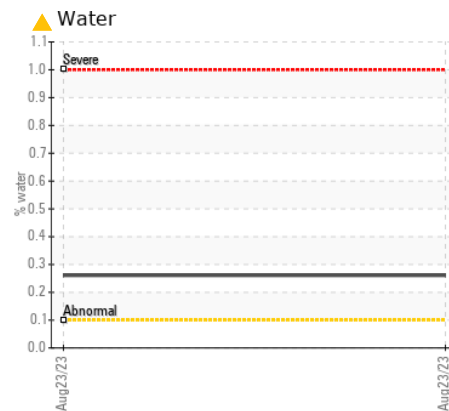
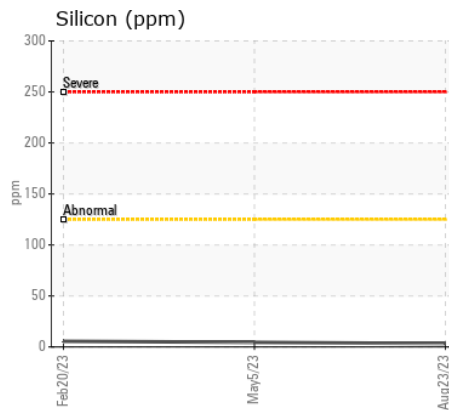
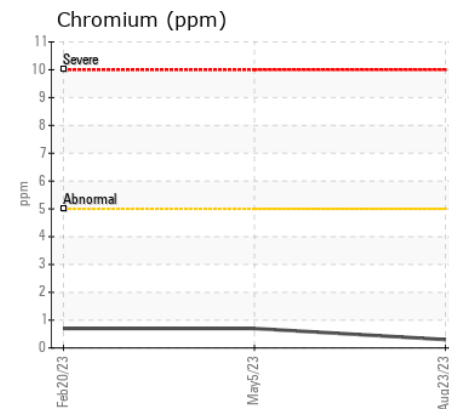
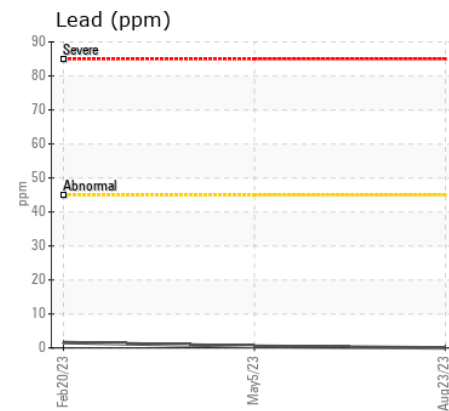
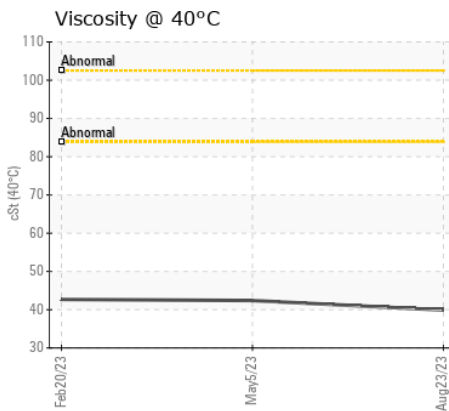
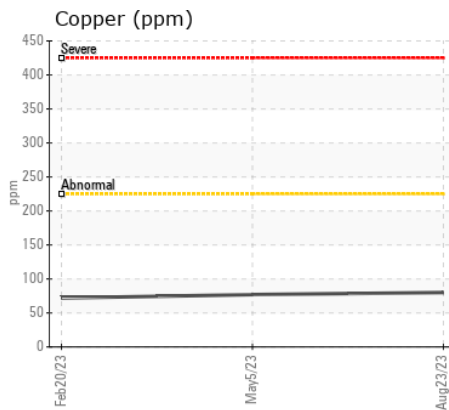
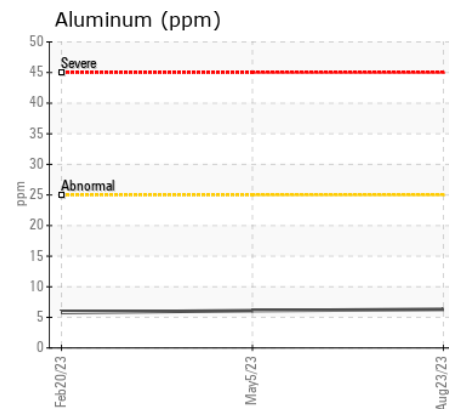
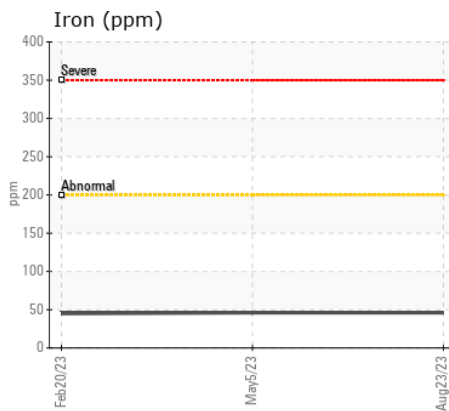
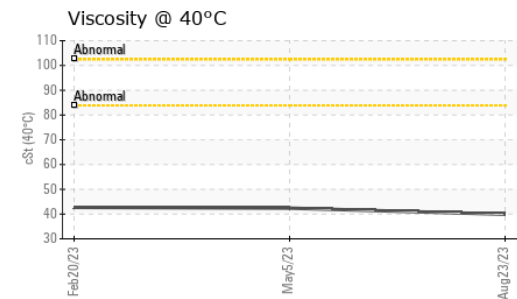
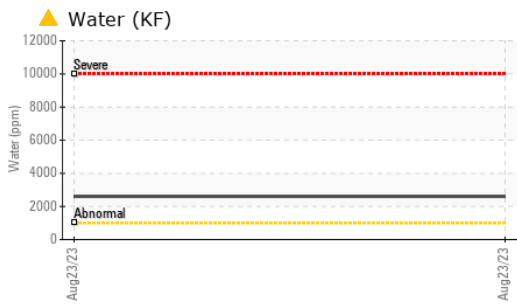
The condition of the fluid is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LHMC100239	LHMC103195	LHMC131403
Sample Date		Client Info		23 Aug 2023	05 May 2023	20 Feb 2023
Machine Age	hrs	Client Info		6878	6853	5898
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		N/A	N/A	Not Changd
Sample Status				MARGINAL	NORMAL	NORMAL

Iron	ppm	ASTM D5185m	>200	46	46	45
Chromium	ppm	ASTM D5185m	>5	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	0	<1	0
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>7	0	0	0
Aluminum	ppm	ASTM D5185m	>25	6	6	6
Lead	ppm	ASTM D5185m	>45	0	<1	2
Copper	ppm	ASTM D5185m	>225	80	77	72
Tin	ppm	ASTM D5185m	>10	2	2	2
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

Silicon	ppm	ASTM D5185m	>125	3	4	6
Potassium	ppm	ASTM D5185m	>20	<1	4	3
Water	%	ASTM D6304	>0.1	▲ 0.261	---	---
ppm Water	ppm	ASTM D6304	>1000	▲ 2610	---	---
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	0.2%	NEG	NEG

Sodium	ppm	ASTM D5185m		40	40	39
Boron	ppm	ASTM D5185m		0	5	4
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	<1	<1
Manganese	ppm	ASTM D5185m		16	18	17
Magnesium	ppm	ASTM D5185m		8	6	14
Calcium	ppm	ASTM D5185m		3139	3251	3094
Phosphorus	ppm	ASTM D5185m		1047	1092	972
Zinc	ppm	ASTM D5185m		1137	1178	1097
Sulfur	ppm	ASTM D5185m		9062	9883	10293
Visc @ 40°C	cSt	ASTM D445		39.9	42.4	42.7



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LHMC100239 **Received** : 16 Jan 2024
Lab Number : 06062270 **Diagnosed** : 18 Jan 2024
Unique Number : 10833652 **Diagnostician** : Don Baldrige
Test Package : MOB 1 (Additional Tests: KF)

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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)