



OIL ANALYSIS REPORT

WEAR	SEVERE
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR A934C C-50 (S/N 060798-1419)
Component
Swing Drive
Fluid
KENDALL NS-MP HYPOID GEAR 80W90 (2 GAL)

RECOMMENDATION

We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

WEAR

High concentration of visible metal present. Gear wear is indicated. Bearing and/or bushing wear is indicated. Generally an abnormal to severe rate of wear throughout the component.

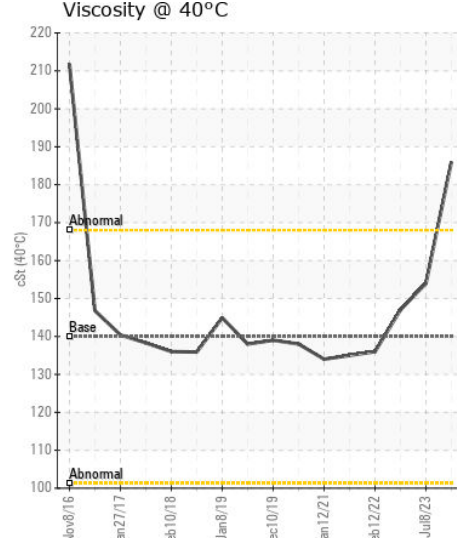
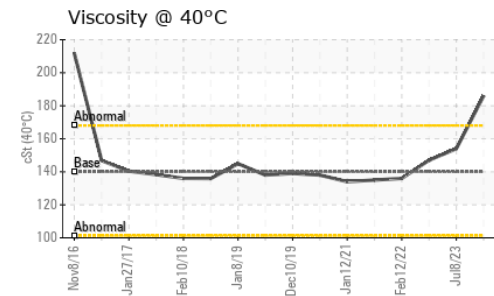
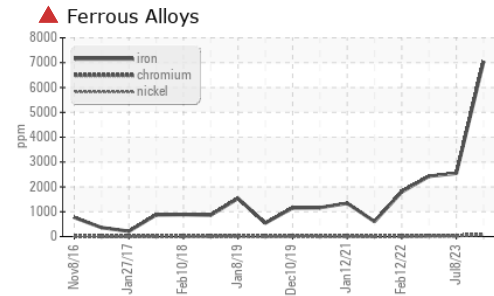
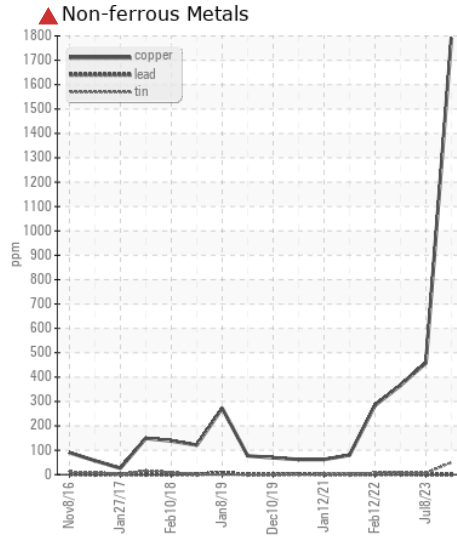
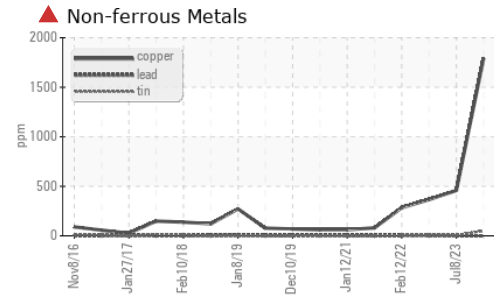
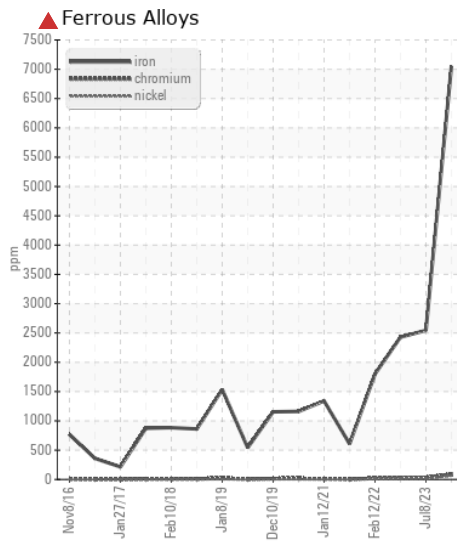
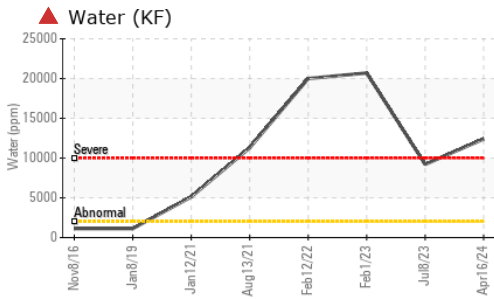
CONTAMINATION

There is a high concentration of water present in the oil.

FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0920308	WC0809694	WC0692188
Sample Date		Client Info		16 Apr 2024	08 Jul 2023	01 Feb 2023
Machine Age	hrs	Client Info		23905	22309	21367
Oil Age	hrs	Client Info		2530	942	2008
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Not Changed	Changed	Changed
Sample Status				SEVERE	SEVERE	SEVERE
Iron	ppm	ASTM D5185m	>1400	▲ 7050	▲ 2544	▲ 2428
Chromium	ppm	ASTM D5185m	>15	▲ 89	▲ 34	▲ 31
Nickel	ppm	ASTM D5185m	>5	▲ 64	11	13
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>4	1	4	6
Lead	ppm	ASTM D5185m	>10	0	0	1
Copper	ppm	ASTM D5185m	>500	▲ 1791	458	366
Tin	ppm	ASTM D5185m	>20	▲ 50	6	8
Vanadium	ppm	ASTM D5185m		<1	0	<1
White Metal	scalar	*Visual	NONE	▲ HEAVY	MODER	MODER
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>15	27	7	8
Potassium	ppm	ASTM D5185m	>20	0	0	1
Water	%	ASTM D6304	>0.2	▲ 1.24	▲ 0.921	▲ 2.07
ppm Water	ppm	ASTM D6304	>2000	▲ 12400	▲ 9210	▲ 20700
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	LIGHT
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	>0.2	▲ 0.2%	▲ 0.2%	▲ 0.2%
Sodium	ppm	ASTM D5185m		0	0	0
Boron	ppm	ASTM D5185m		57	76	188
Barium	ppm	ASTM D5185m		<1	0	2
Molybdenum	ppm	ASTM D5185m		10	3	3
Manganese	ppm	ASTM D5185m		46	20	17
Magnesium	ppm	ASTM D5185m		7	0	3
Calcium	ppm	ASTM D5185m		26	7	14
Phosphorus	ppm	ASTM D5185m		679	973	1487
Zinc	ppm	ASTM D5185m		59	38	32
Sulfur	ppm	ASTM D5185m		50757	24993	28462
Visc @ 40°C	cSt	ASTM D445	140	186	154	147



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0920308
Lab Number : 06160757
Unique Number : 10996180
Test Package : CONST (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)