



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION



Machine Id
LIEBHERR A934C 064064-1007
Component
Rear Right Wheel Hub
Fluid
GEAR OIL LS 80W90 (1 GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

There is no indication of any contamination in the oil.

FLUID CONDITION

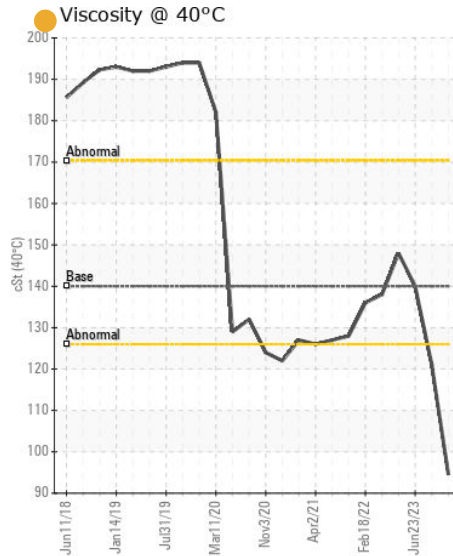
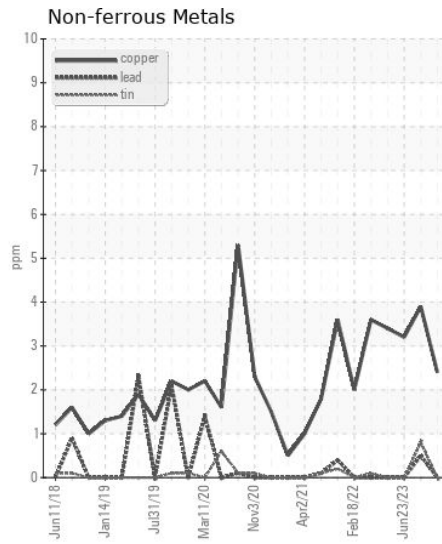
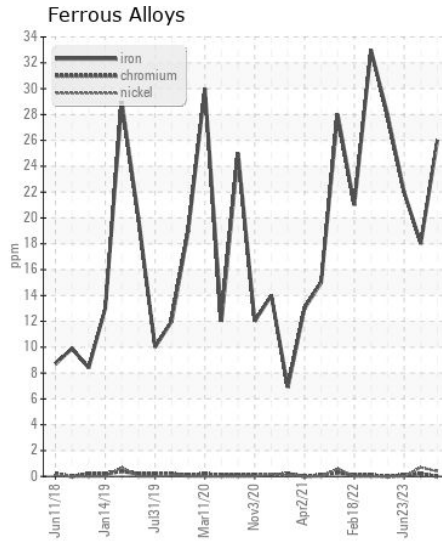
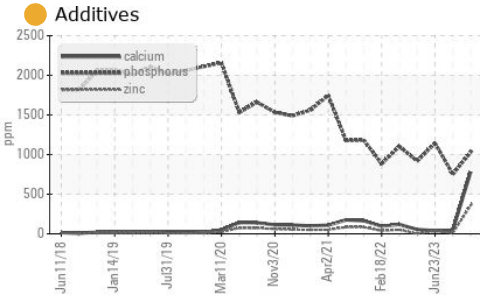
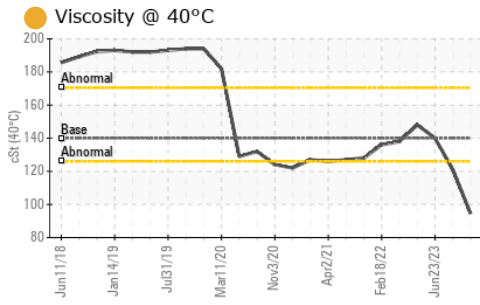
The oil viscosity is lower than normal. This plus the additive levels indicates the addition of a different brand, or type of oil. Confirm oil type.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0290239	LH0272767	LH0254767
Sample Date		Client Info		27 Jun 2024	21 Dec 2023	23 Jun 2023
Machine Age	hrs	Client Info		26934	25949	24973
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ATTENTION	NORMAL	NORMAL

Iron	ppm	ASTM D5185m	>500	26	18	22
Chromium	ppm	ASTM D5185m	>4	0	<1	<1
Nickel	ppm	ASTM D5185m	>3	<1	<1	0
Titanium	ppm	ASTM D5185m		<1	1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>15	<1	2	<1
Lead	ppm	ASTM D5185m	>4	0	<1	0
Copper	ppm	ASTM D5185m	>100	2	4	3
Tin	ppm	ASTM D5185m	>3	0	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

Silicon	ppm	ASTM D5185m	>65	4	2	4
Potassium	ppm	ASTM D5185m	>20	<1	2	2
Water		WC Method	>0.2	NEG	NEG	NEG
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	>0.2	NEG	NEG	NEG

Sodium	ppm	ASTM D5185m		1	0	<1
Boron	ppm	ASTM D5185m	150	0	3	8
Barium	ppm	ASTM D5185m		0	0	2
Molybdenum	ppm	ASTM D5185m		0	1	<1
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	10	6	8	9
Calcium	ppm	ASTM D5185m	70	781	46	40
Phosphorus	ppm	ASTM D5185m	2000	1030	750	1144
Zinc	ppm	ASTM D5185m	50	356	9	36
Sulfur	ppm	ASTM D5185m	20000	22626	25051	30969
Visc @ 40°C	cSt	ASTM D445	140	94.5	121	140



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LH0290239
Lab Number : 06237182
Unique Number : 11126016
Test Package : CONST

Received : 15 Jul 2024
Tested : 17 Jul 2024
Diagnosed : 17 Jul 2024 - Don Baldrige

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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)