



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR L586 052323-1334
Component
Front Differential
Fluid
LIEBHERR GEAR BASIC 90 LS (60 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0272204	LH0229248	LH0229184
Sample Date		Client Info		17 May 2024	07 Mar 2023	11 Oct 2022
Machine Age	hrs	Client Info		12782	9828	9071
Oil Age	hrs	Client Info		1000	1000	982
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				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>1500	50	48	87
Chromium	ppm	ASTM D5185m	>10	1	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	0	0
Titanium	ppm	ASTM D5185m	>5	<1	0	0
Silver	ppm	ASTM D5185m		<1	0	0
Aluminum	ppm	ASTM D5185m	>20	1	<1	2
Lead	ppm	ASTM D5185m	>5	<1	0	6
Copper	ppm	ASTM D5185m	>200	52	27	63
Tin	ppm	ASTM D5185m	>10	2	0	1
Vanadium	ppm	ASTM D5185m		<1	0	<1
White Metal	scalar	*Visual	NONE	NONE	MODER	MODER
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

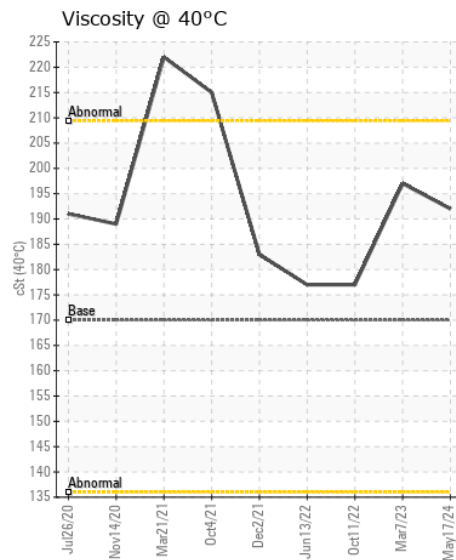
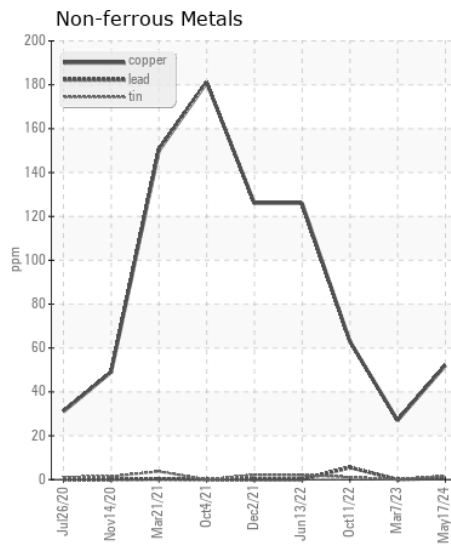
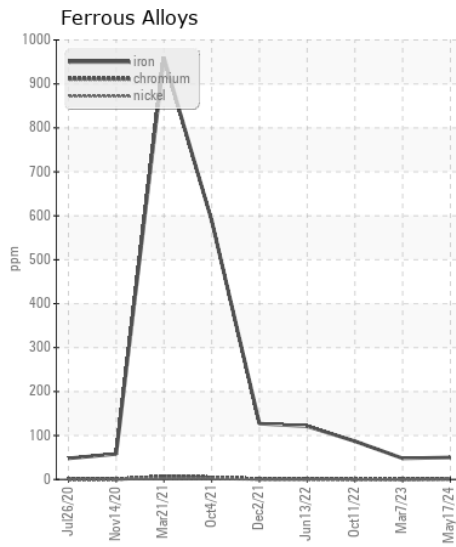
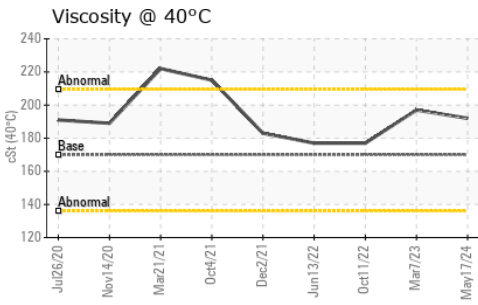
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>60	3	2	4
Potassium	ppm	ASTM D5185m	>20	2	0	0
Water		WC Method	>.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	>.2	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		<1	1	1
Boron	ppm	ASTM D5185m	0	11	0	0
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	<1	0	0
Manganese	ppm	ASTM D5185m	0	3	1	2
Magnesium	ppm	ASTM D5185m	<1	2	2	0
Calcium	ppm	ASTM D5185m	<1	28	8	0
Phosphorus	ppm	ASTM D5185m	2143	2327	2353	2345
Zinc	ppm	ASTM D5185m	<1	29	13	33
Sulfur	ppm	ASTM D5185m	23468	34036	32821	25056
Visc @ 40°C	cSt	ASTM D445	170	192	197	177



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LH0272204
Lab Number : 06186948
Unique Number : 11043700
Test Package : CONST

Received : 21 May 2024
Tested : 23 May 2024
Diagnosed : 23 May 2024 - Don Baldrige

BENEVENTO SAND & STONE
 900 SALEM STREET PO Box 454
 WILMINGTON, MA
 US 01887
 Contact: Service Manager

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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