



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR A918 095565-1184
Component
Rear Differential
Fluid
LIEBHERR GEAR BASIC 90 LS (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0264446	LH0268878	LH0235998
Sample Date		Client Info		12 Jun 2024	24 Jan 2024	23 Sep 2022
Machine Age	hrs	Client Info		17064	15862	9705
Oil Age	hrs	Client Info		1000	1000	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	20	17	23
Chromium	ppm	ASTM D5185m	>5	<1	0	4
Nickel	ppm	ASTM D5185m	>10	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m		<1	0	0
Aluminum	ppm	ASTM D5185m	>5	3	<1	2
Lead	ppm	ASTM D5185m	>5	<1	<1	<1
Copper	ppm	ASTM D5185m	>125	3	2	2
Tin	ppm	ASTM D5185m	>5	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

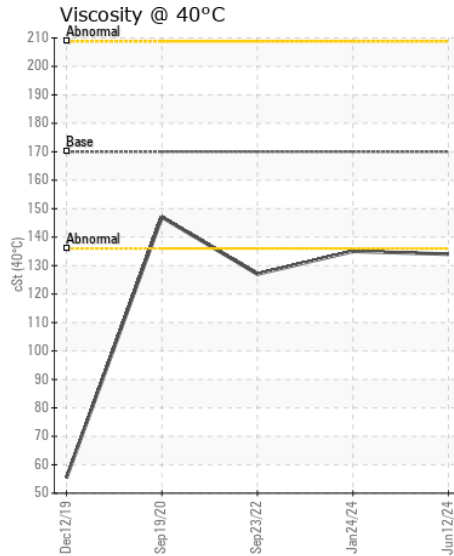
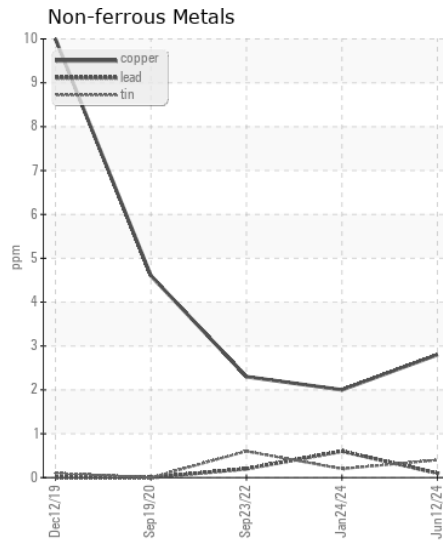
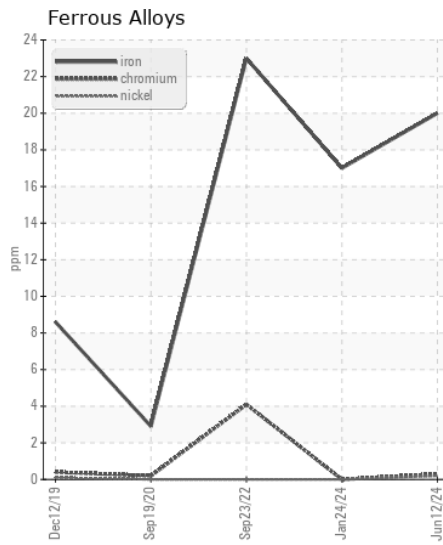
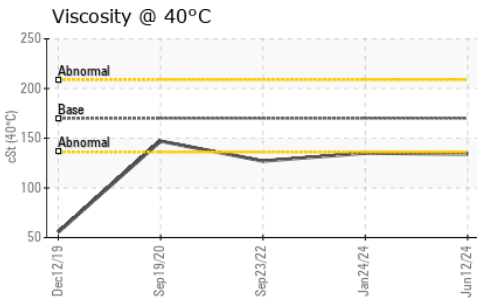
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	2	1	4
Potassium	ppm	ASTM D5185m	>20	2	1	<1
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

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		0	2	2
Boron	ppm	ASTM D5185m	0	216	210	303
Barium	ppm	ASTM D5185m	0	3	2	<1
Molybdenum	ppm	ASTM D5185m	0	1	0	1
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	<1	14	17	28
Calcium	ppm	ASTM D5185m	<1	67	67	130
Phosphorus	ppm	ASTM D5185m	2143	1357	1478	1771
Zinc	ppm	ASTM D5185m	<1	33	28	57
Sulfur	ppm	ASTM D5185m	23468	17155	19411	22906
Visc @ 40°C	cSt	ASTM D445	170	134	135	127



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LH0264446
Lab Number : 06225430
Unique Number : 11103627
Test Package : CONST
Received : 01 Jul 2024
Tested : 02 Jul 2024
Diagnosed : 03 Jul 2024 - Jonathan Hester

UNITED SCRAP
 1545 S CICERO AVE
 BURR RIDGE, IL
 US 60527
 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)

T:
F: