



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR A918 095565-1184
Component
Front 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		LH0264440	LH0268876	LH0235818
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		N/A	N/A	Changed
Sample Status				NORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	13	17	15
Chromium	ppm	ASTM D5185m	>5	<1	0	<1
Nickel	ppm	ASTM D5185m	>10	<1	<1	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		<1	0	0
Aluminum	ppm	ASTM D5185m	>5	3	<1	<1
Lead	ppm	ASTM D5185m	>5	0	<1	0
Copper	ppm	ASTM D5185m	>125	1	2	<1
Tin	ppm	ASTM D5185m	>5	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	MODER	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

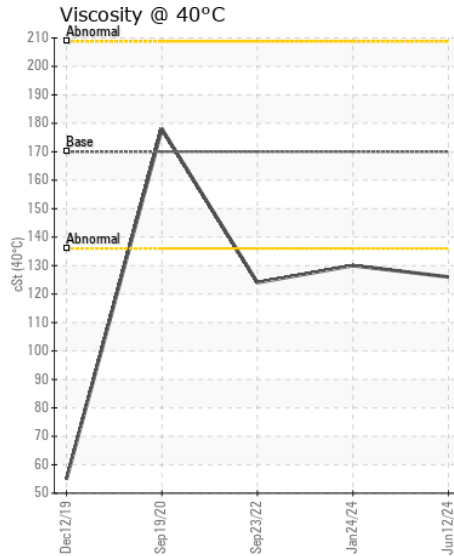
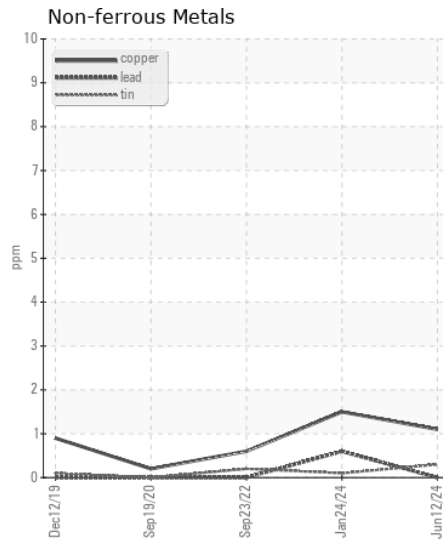
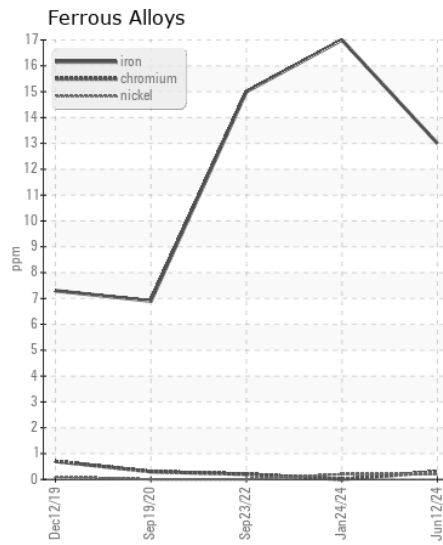
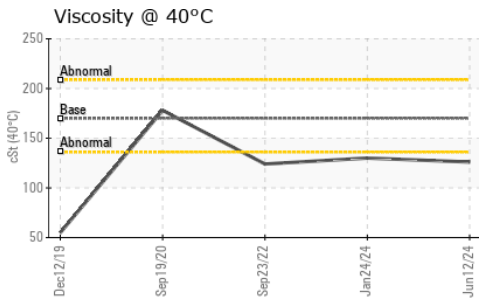
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	1	2	<1
Potassium	ppm	ASTM D5185m	>20	2	2	0
Water		WC Method	>0.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER	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	1
Boron	ppm	ASTM D5185m	0	330	313	336
Barium	ppm	ASTM D5185m	0	<1	0	0
Molybdenum	ppm	ASTM D5185m	0	2	<1	2
Manganese	ppm	ASTM D5185m	0	<1	2	1
Magnesium	ppm	ASTM D5185m	<1	22	37	36
Calcium	ppm	ASTM D5185m	<1	72	84	88
Phosphorus	ppm	ASTM D5185m	2143	1596	1764	1807
Zinc	ppm	ASTM D5185m	<1	42	49	51
Sulfur	ppm	ASTM D5185m	23468	17479	19866	23423
Visc @ 40°C	cSt	ASTM D445	170	126	130	124



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : LH0264440

Lab Number : 06225431

Unique Number : 11103628

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)

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