



OIL ANALYSIS REPORT

WEAR
CONTAMINATION
FLUID CONDITION

ABNORMAL

SEVERE

NORMAL



Area

LIEBHERR

Machine Id

1528-113529 LIEBHERR LH60C 1528-113529

Component

Left Final Drive

Fluid

GEAR OIL LS 80W90 (--- GAL)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DJJ0023783	LHMC160634	LH0157978
Sample Date		Client Info		13 Jun 2024	05 Jan 2022	10 Feb 2021
Machine Age	hrs	Client Info		7502	3496	2123
Oil Age	hrs	Client Info		0	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	N/A
Sample Status				SEVERE	ABNORMAL	ATTENTION

WEAR

Gear wear is indicated. Bearing and/or bushing wear is indicated.

Iron	ppm	ASTM D5185m	>500	▲ 1109	304	5
Chromium	ppm	ASTM D5185m	>10	▲ 13	4	<1
Nickel	ppm	ASTM D5185m	>10	9	4	0
Titanium	ppm	ASTM D5185m		12	3	<1
Silver	ppm	ASTM D5185m		0	<1	0
Aluminum	ppm	ASTM D5185m	>25	● 148	● 40	<1
Lead	ppm	ASTM D5185m	>25	1	2	<1
Copper	ppm	ASTM D5185m	>50	▲ 78	27	0
Tin	ppm	ASTM D5185m	>10	2	1	0
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	MODER	MODER
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

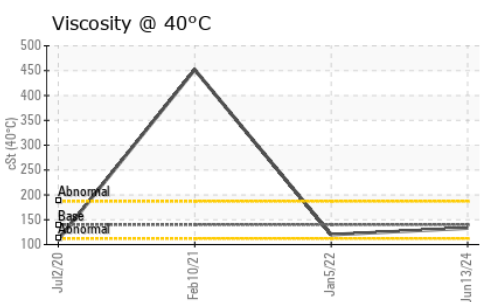
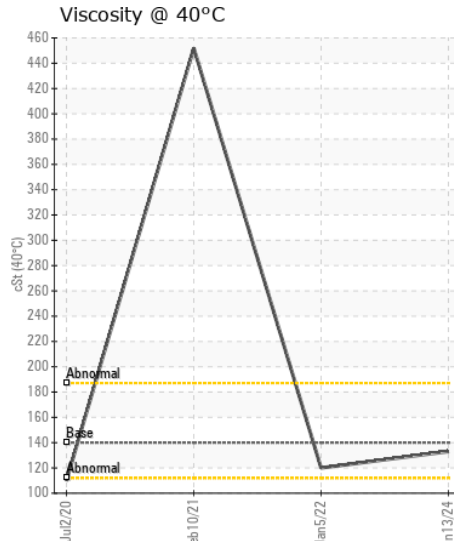
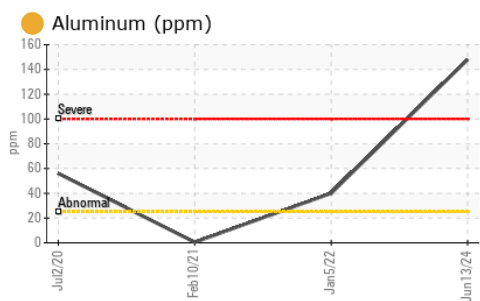
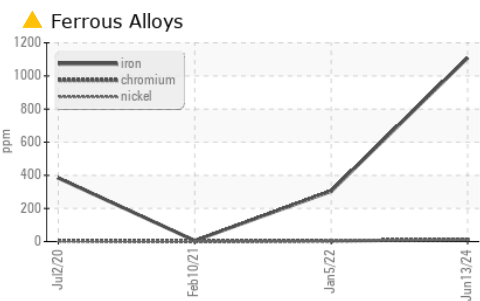
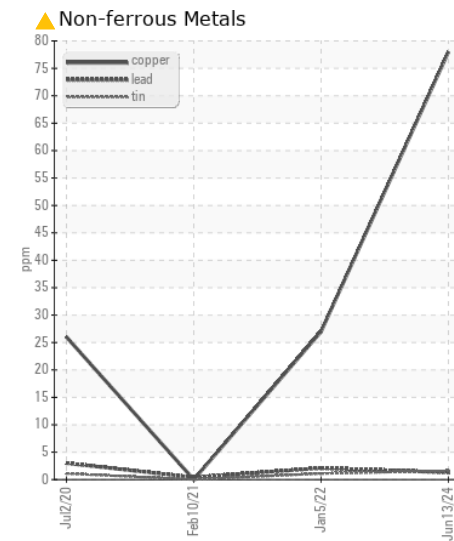
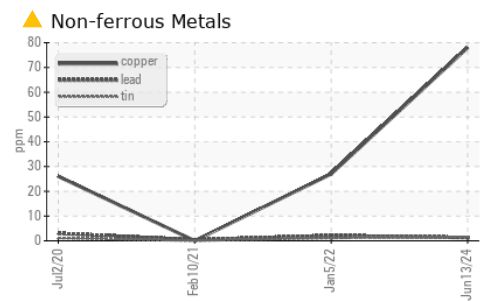
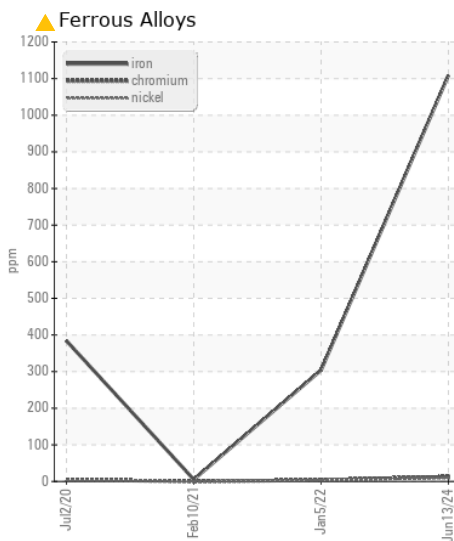
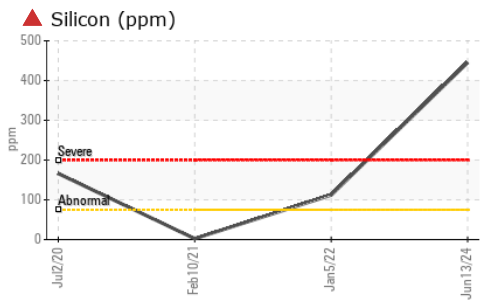
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>75	▲ 445	▲ 112	2
Potassium	ppm	ASTM D5185m	>20	29	12	0
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 oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m		11	8	1
Boron	ppm	ASTM D5185m	150	5	28	98
Barium	ppm	ASTM D5185m		<1	0	0
Molybdenum	ppm	ASTM D5185m		3	8	0
Manganese	ppm	ASTM D5185m		12	4	0
Magnesium	ppm	ASTM D5185m	10	60	44	0
Calcium	ppm	ASTM D5185m	70	393	265	0
Phosphorus	ppm	ASTM D5185m	2000	994	665	433
Zinc	ppm	ASTM D5185m	50	119	110	0
Sulfur	ppm	ASTM D5185m	20000	19388	20239	7307
Visc @ 40°C	cSt	ASTM D445	140	133	120	● 452



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DJJ0023783
Lab Number : 06213894
Unique Number : 11086758
Test Package : CONST

METAL RECYCLING SERVICES - GASTONIA
 5401 S YORK HWY
 GASTONIA, NC
 US 28052
 Contact: RYAN BOWDEN

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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