



OIL ANALYSIS REPORT

WEAR	SEVERE
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL



Area

LIEBHERR

Machine Id

062713-1419 LIEBHERR A934CHD 062713-1419

Component

Front Left Wheel Hub

Fluid

{not provided} (--- 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 advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

WEAR

Gear wear is indicated.

CONTAMINATION

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

FLUID CONDITION

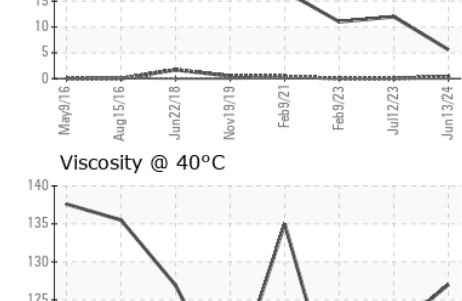
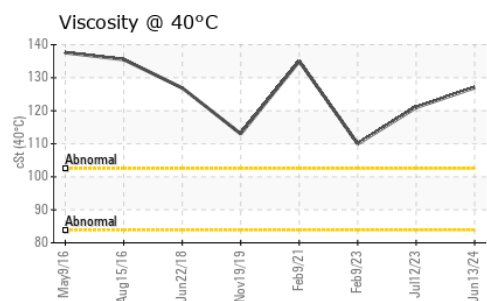
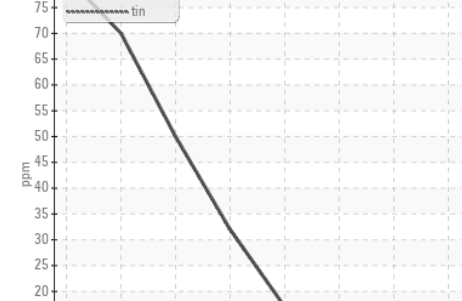
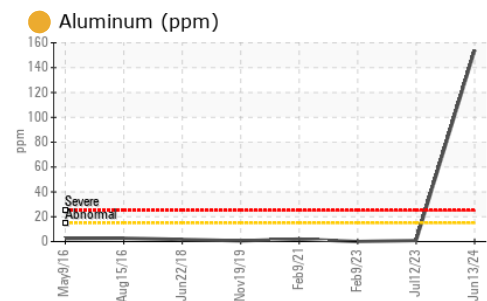
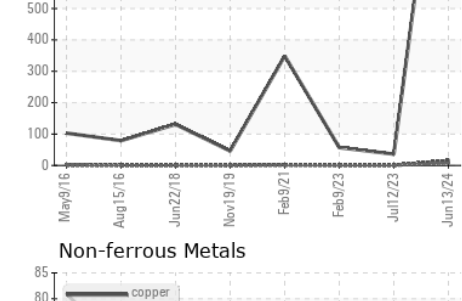
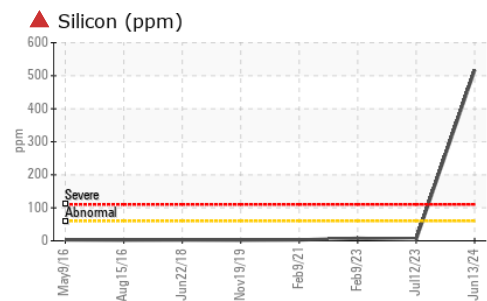
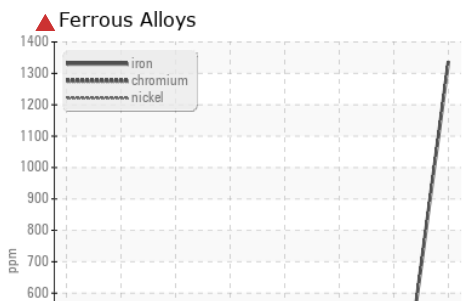
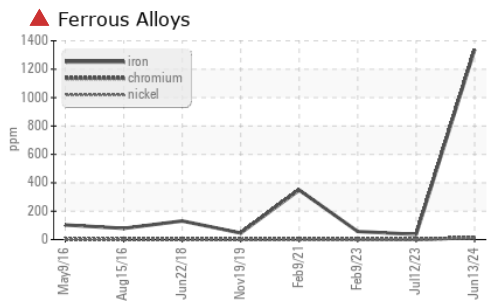
The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DJJ0023805	LH0229494	DJJ0011189
Sample Date		Client Info		13 Jun 2024	12 Jul 2023	09 Feb 2023
Machine Age	hrs	Client Info		12992	12515	12363
Oil Age	hrs	Client Info		0	500	1000
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	NORMAL	NORMAL

Iron	ppm	ASTM D5185m	>450	▲ 1337	36	57
Chromium	ppm	ASTM D5185m	>4	▲ 15	<1	<1
Nickel	ppm	ASTM D5185m	>2	▲ 7	0	0
Titanium	ppm	ASTM D5185m		14	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>15	● 154	<1	0
Lead	ppm	ASTM D5185m	>4	<1	0	0
Copper	ppm	ASTM D5185m	>75	6	12	11
Tin	ppm	ASTM D5185m		0	0	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	LIGHT	MODER
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

Silicon	ppm	ASTM D5185m	>60	▲ 517	4	8
Potassium	ppm	ASTM D5185m	>20	20	3	3
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		13	0	5
Boron	ppm	ASTM D5185m		152	13	68
Barium	ppm	ASTM D5185m		0	0	1
Molybdenum	ppm	ASTM D5185m		1	15	36
Manganese	ppm	ASTM D5185m		10	1	1
Magnesium	ppm	ASTM D5185m		20	13	21
Calcium	ppm	ASTM D5185m		3902	370	878
Phosphorus	ppm	ASTM D5185m		1298	542	689
Zinc	ppm	ASTM D5185m		1645	267	528
Sulfur	ppm	ASTM D5185m		4385	15832	8977
Visc @ 40°C	cSt	ASTM D445		127	121	110



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DJJ0023805
Lab Number : 06213898
Unique Number : 11086762
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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