



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL



Area

(344443)

Machine Id

LIEBHERR LH24 118108-1251

Component

Transmission (Manual)

Fluid

KLONDIKE FULL SYNTHETIC 75W90 (--- GAL)

RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0250458	LH0260609	LH0250356
Sample Date		Client Info		04 Apr 2024	21 Sep 2023	04 Apr 2023
Machine Age	hrs	Client Info		7662	6390	5211
Oil Age	hrs	Client Info		0	0	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				ABNORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>200	57	53	34
Chromium	ppm	ASTM D5185(m)	>5	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	<1	<1	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>7	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>25	1	<1	1
Lead	ppm	ASTM D5185(m)	>45	<1	2	1
Copper	ppm	ASTM D5185(m)	>225	47	65	31
Tin	ppm	ASTM D5185(m)	>10	2	2	1
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE

CONTAMINATION

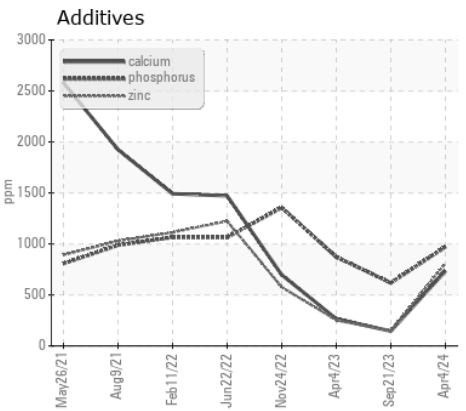
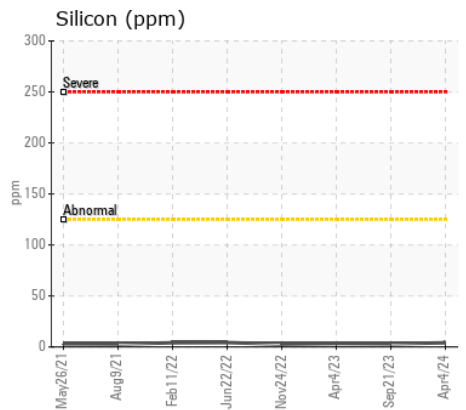
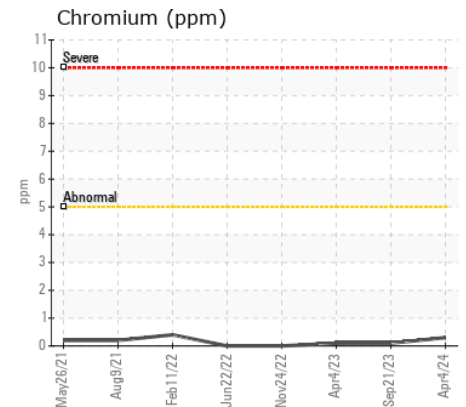
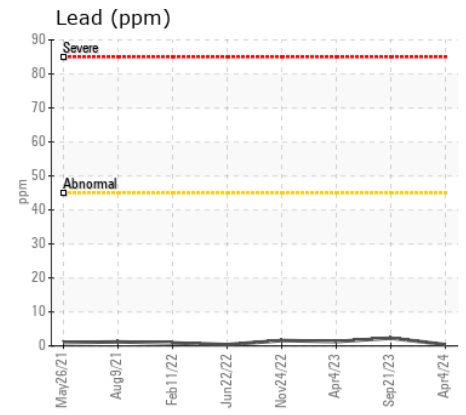
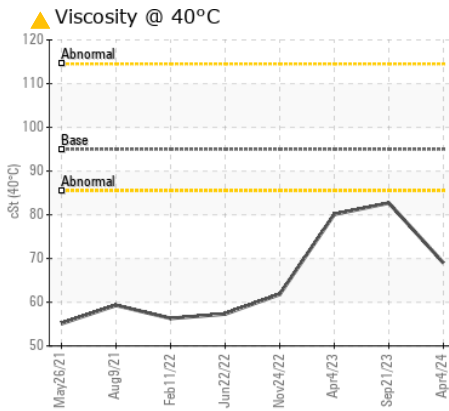
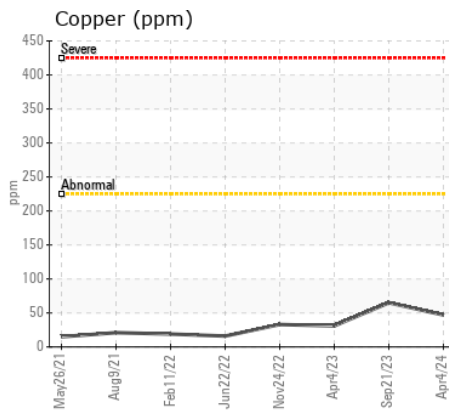
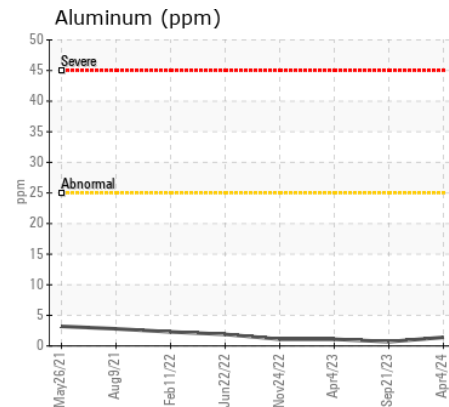
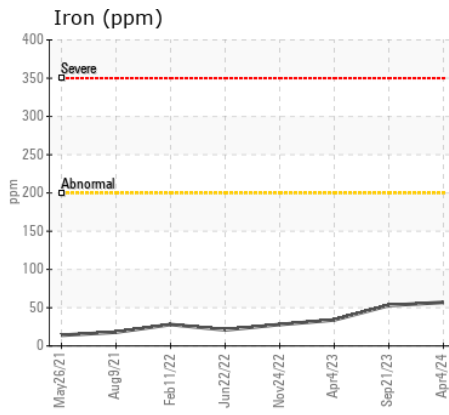
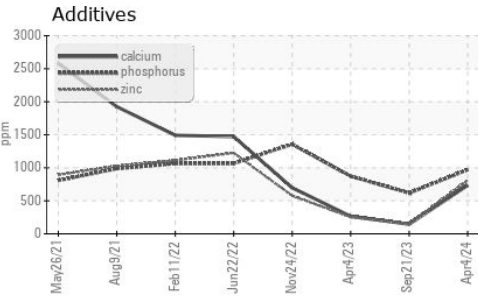
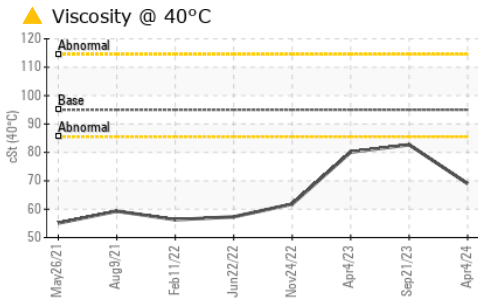
There is no indication of any contamination in the fluid.

Silicon	ppm	ASTM D5185(m)	>125	4	3	3
Potassium	ppm	ASTM D5185(m)	>20	0	<1	<1
Water		WC Method	>0.1	NEG	NEG	NEG
Silt	scalar	Visual*	NONE	NONE	VLITE	VLITE
Debris	scalar	Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	VLITE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	NEG

FLUID CONDITION

Viscosity of sample indicates oil is within SAE 30 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The condition of the fluid is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		3	3	2
Boron	ppm	ASTM D5185(m)		19	26	50
Barium	ppm	ASTM D5185(m)		<1	<1	0
Molybdenum	ppm	ASTM D5185(m)		40	8	11
Manganese	ppm	ASTM D5185(m)		13	6	9
Magnesium	ppm	ASTM D5185(m)		660	68	147
Calcium	ppm	ASTM D5185(m)		734	145	266
Phosphorus	ppm	ASTM D5185(m)		971	618	873
Zinc	ppm	ASTM D5185(m)		808	147	252
Sulfur	ppm	ASTM D5185(m)		8161	16387	16020
Visc @ 40°C	cSt	ASTM D7279(m)	95	▲ 69.0	82.7	80.1



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0250458 **Received** : 23 Apr 2024
Lab Number : 02631011 **Tested** : 23 Apr 2024
Unique Number : 5772164 **Diagnosed** : 23 Apr 2024 - Kevin Marson
Test Package : MOB 1

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 8081 MEADOW AVE.
 BURNABY, BC
 CA V3N 2V9
 Contact: John Anderson
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 F:

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.