



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR A934C 057446-1007
Component
Rear Left Wheel Hub
Fluid
KLONDIKE FULL SYNTHETIC 75W90 (3 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		LH0281189	LH0192471	LH0226705
Sample Date		Client Info		22 Jan 2024	02 Dec 2022	01 Jun 2022
Machine Age	hrs	Client Info		26482	25052	24519
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				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>500	8	8	5
Chromium	ppm	ASTM D5185(m)	>4	0	0	0
Nickel	ppm	ASTM D5185(m)	>3	0	<1	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	0	0
Aluminum	ppm	ASTM D5185(m)	>15	<1	0	<1
Lead	ppm	ASTM D5185(m)	>4	<1	<1	0
Copper	ppm	ASTM D5185(m)	>100	6	4	4
Tin	ppm	ASTM D5185(m)	>3	0	0	0
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

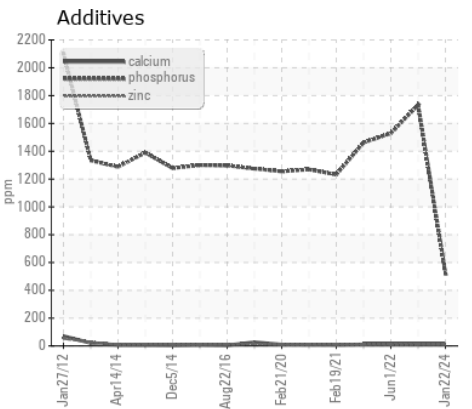
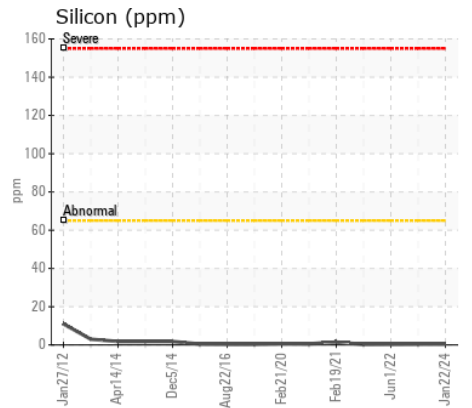
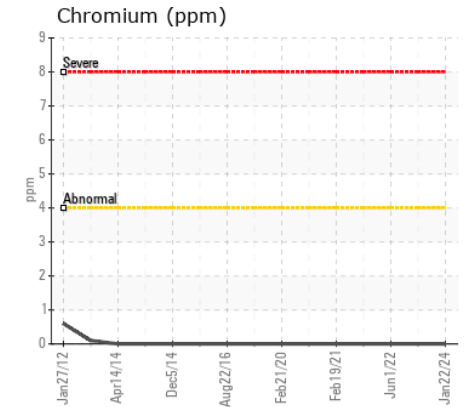
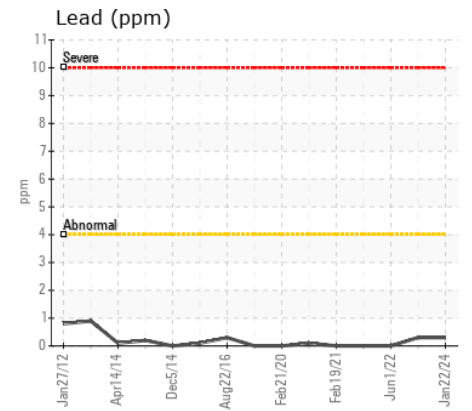
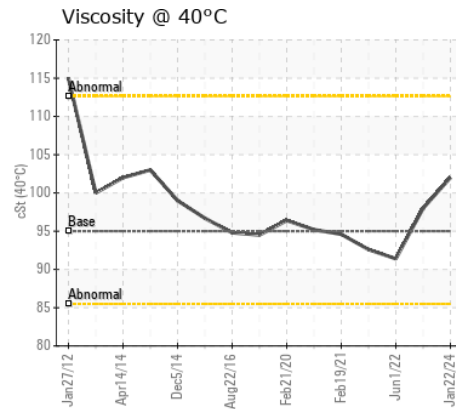
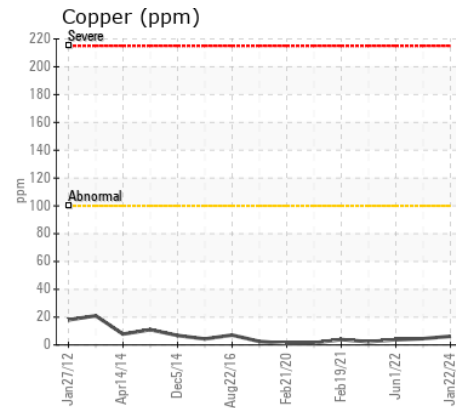
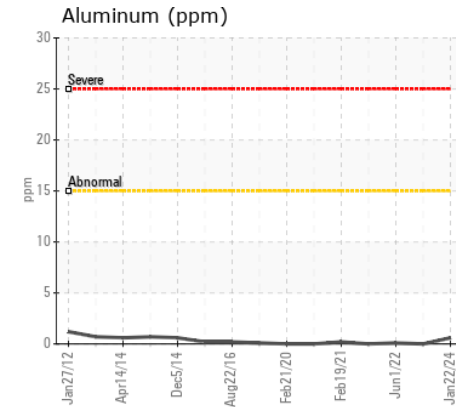
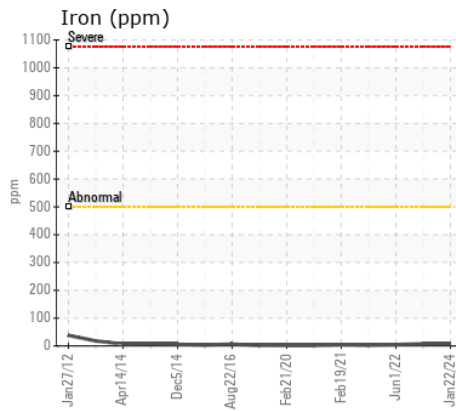
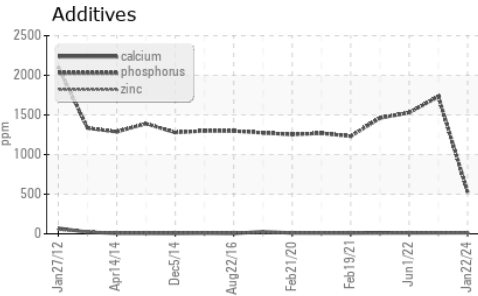
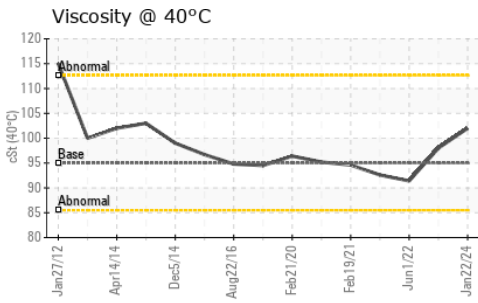
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>65	<1	<1	<1
Potassium	ppm	ASTM D5185(m)	>20	2	0	<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	VLITE	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

Additive levels indicate the addition of a different brand, or type of oil.
The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		1	1	<1
Boron	ppm	ASTM D5185(m)		30	195	224
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		0	0	0
Manganese	ppm	ASTM D5185(m)		0	<1	<1
Magnesium	ppm	ASTM D5185(m)		2	<1	<1
Calcium	ppm	ASTM D5185(m)		13	12	11
Phosphorus	ppm	ASTM D5185(m)		527	1733	1529
Zinc	ppm	ASTM D5185(m)		10	9	8
Sulfur	ppm	ASTM D5185(m)		16978	22651	21355
Visc @ 40°C	cSt	ASTM D7279(m)	95	102	98.0	91.4



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9

Sample No. : LH0281189

Lab Number : 02616327

Unique Number : 5733437

Test Package : MOB 1

Received : 16 Feb 2024

Tested : 16 Feb 2024

Diagnosed : 16 Feb 2024 - Wes Davis

ABC RECYCLING

8081 MEADOW AVE.

BURNABY, BC

CA V3N 2V9

Contact: John Anderson

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T: (778)988-9944

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.