



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR L556 059655-1332
Component
Front Left Wheel Hub
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		LH	LH0180819	LH0180806
Sample Date		Client Info		28 Feb 2024	10 Dec 2021	10 Sep 2021
Machine Age	hrs	Client Info		250	5000	4019
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	Changed	Changed
Filter Changed		Client Info		N/A	N/A	None
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>500	22	60	53
Chromium	ppm	ASTM D5185(m)	>8	0	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		<1	<1	<1
Aluminum	ppm	ASTM D5185(m)	>5	1	<1	<1
Lead	ppm	ASTM D5185(m)	>5	<1	<1	1
Copper	ppm	ASTM D5185(m)	>50	8	32	38
Tin	ppm	ASTM D5185(m)		<1	2	2
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	LIGHT	VLITE	VLITE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE

CONTAMINATION

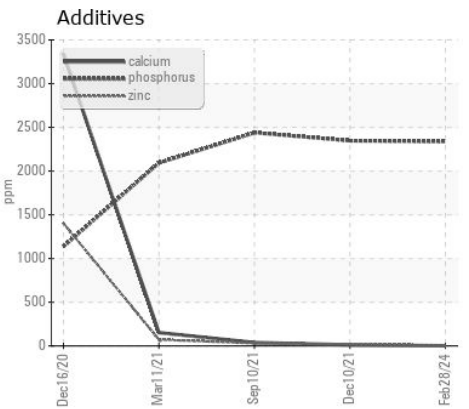
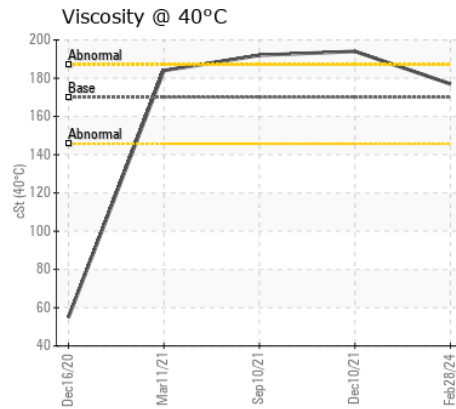
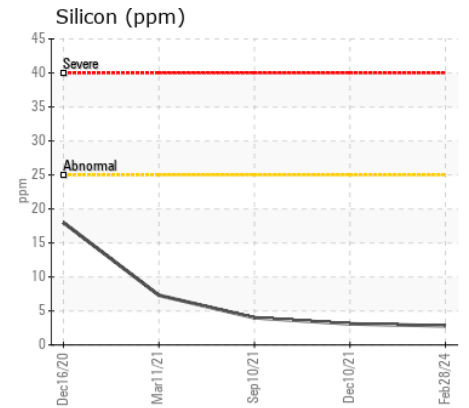
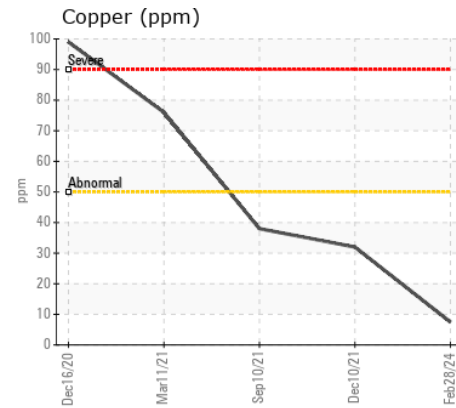
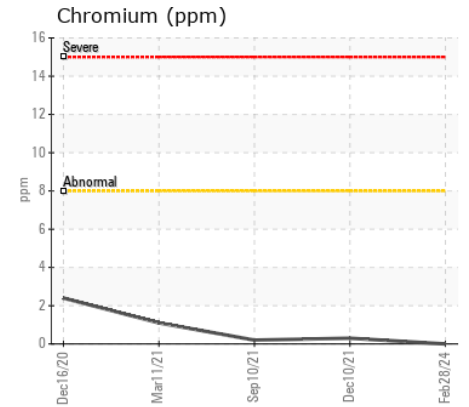
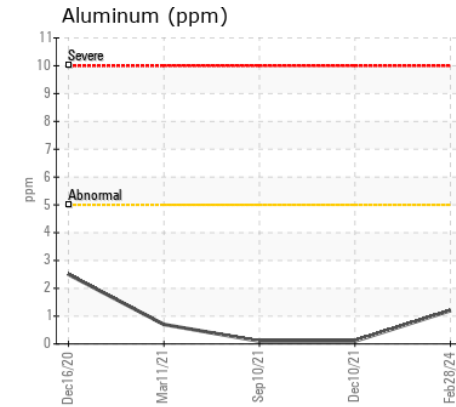
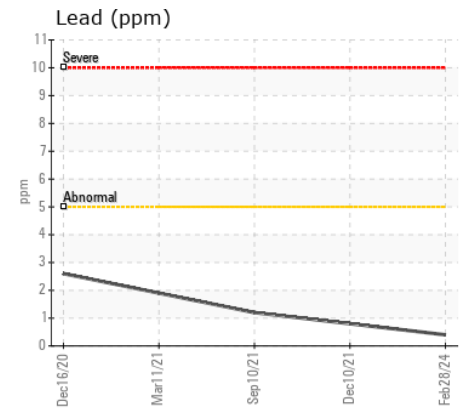
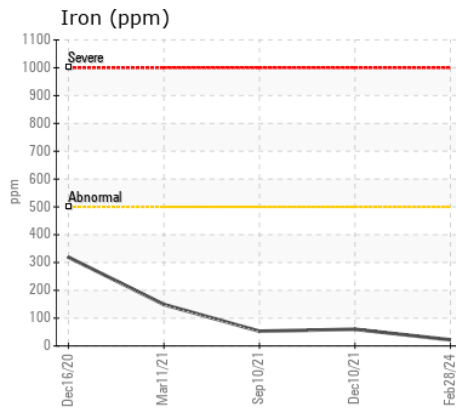
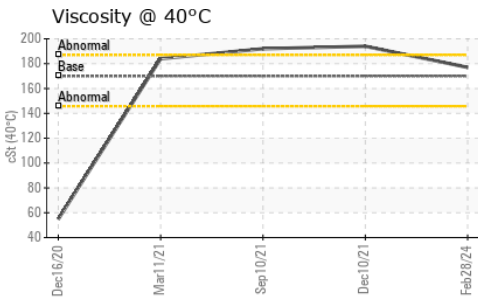
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	3	3	4
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	<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	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 D5185(m)		<1	2	3
Boron	ppm	ASTM D5185(m)	0	<1	<1	2
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	0	<1	3	2
Manganese	ppm	ASTM D5185(m)	0	0	2	3
Magnesium	ppm	ASTM D5185(m)	<1	<1	3	<1
Calcium	ppm	ASTM D5185(m)	<1	2	12	39
Phosphorus	ppm	ASTM D5185(m)	2143	2338	2347	2439
Zinc	ppm	ASTM D5185(m)	<1	5	19	29
Sulfur	ppm	ASTM D5185(m)	23468	25814	23654	24590
Visc @ 40°C	cSt	ASTM D7279(m)	170	177	194	192



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH
Lab Number : 02619040
Unique Number : 5736150
Test Package : MOB 1
Received : 29 Feb 2024
Tested : 29 Feb 2024
Diagnosed : 29 Feb 2024 - Wes Davis

PRODUITS FORESTIERS D.G. LTEE
 313 RANG ST-JOSEPH
 STE-AURELIE, QC
 CA G0M 1M0
 Contact: Roger .

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.

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