



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR LH60M 1217-94975
Component
Front Right Wheel Hub
Fluid
GEAR OIL SAE 80W90 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LHMC165912	LHMC119724	LHMC116178
Sample Date		Client Info		10 Apr 2024	13 Jun 2019	02 May 2019
Machine Age	hrs	Client Info		8268	5269	4802
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	N/A	N/A
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 D5185m	>650	225	128	264
Chromium	ppm	ASTM D5185m	>4	2	1	2
Nickel	ppm	ASTM D5185m	>4	0	1	<1
Titanium	ppm	ASTM D5185m	>4	<1	0	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	1	<1	0
Lead	ppm	ASTM D5185m	>4	0	0	0
Copper	ppm	ASTM D5185m	>60	5	7	22
Tin	ppm	ASTM D5185m	>4	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

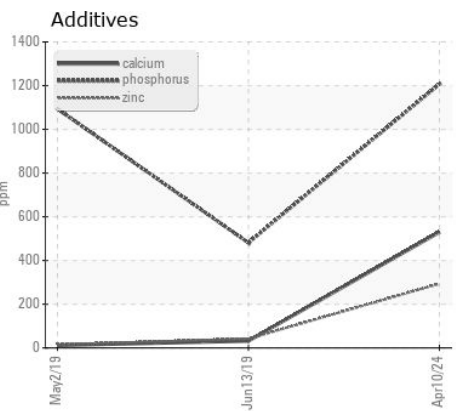
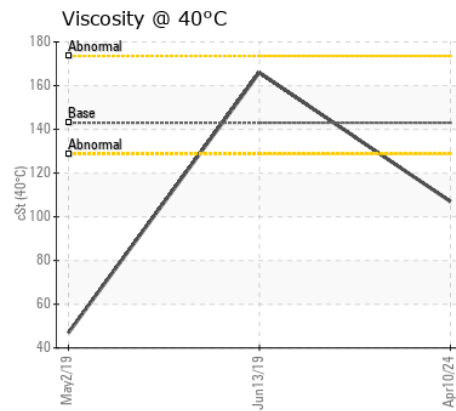
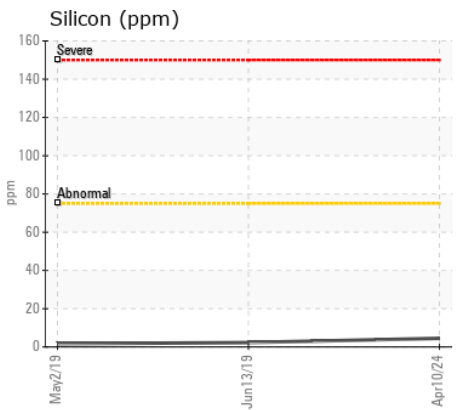
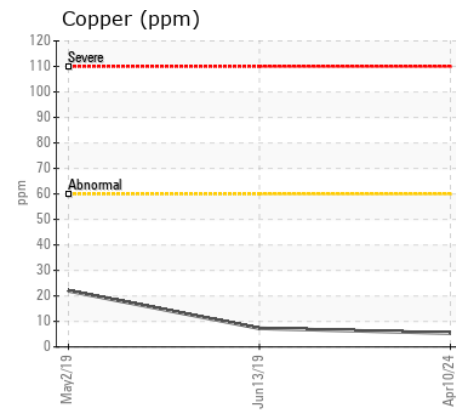
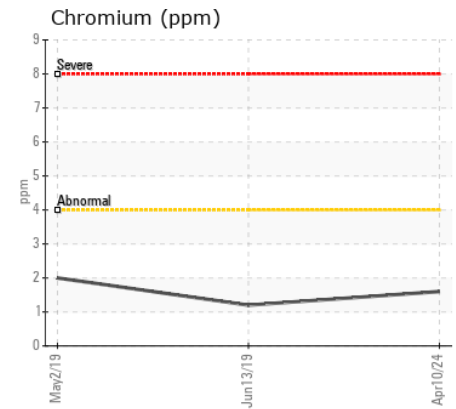
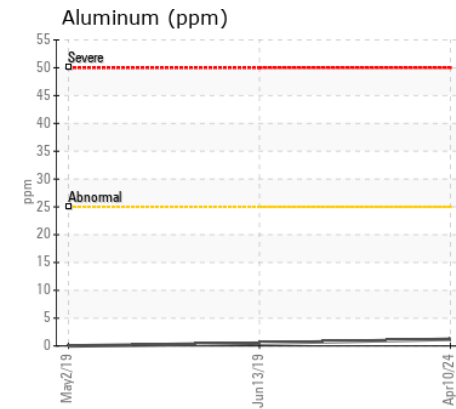
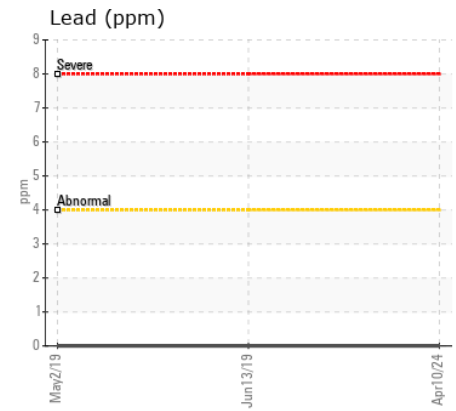
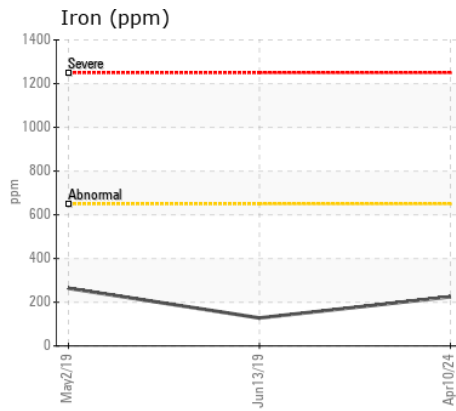
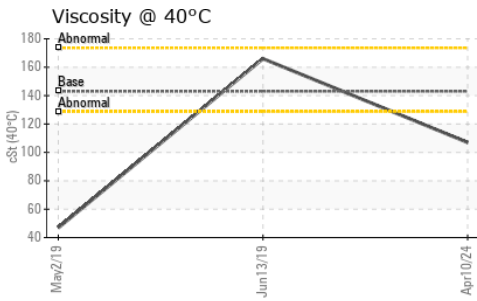
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	4	2	2
Potassium	ppm	ASTM D5185m	>20	8	7	4
Water		WC Method	>0.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	LIGHT
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 D5185m	>170	<1	2	6
Boron	ppm	ASTM D5185m	400	141	3	6
Barium	ppm	ASTM D5185m	200	3	77	279
Molybdenum	ppm	ASTM D5185m	12	7	1	0
Manganese	ppm	ASTM D5185m		1	2	4
Magnesium	ppm	ASTM D5185m	12	80	8	0
Calcium	ppm	ASTM D5185m	150	530	32	12
Phosphorus	ppm	ASTM D5185m	1650	1207	481	1094
Zinc	ppm	ASTM D5185m	125	294	42	15
Sulfur	ppm	ASTM D5185m	22500	18530	13601	25879
Visc @ 40°C	cSt	ASTM D445	143	107	166	46.9



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LHMC165912
Lab Number : 06151347
Unique Number : 10981425
Test Package : MOB 1

Received : 16 Apr 2024
Tested : 18 Apr 2024
Diagnosed : 19 Apr 2024 - Sean Felton

AMERICAN STATE EQUIPMENT CO. (RENTAL TO ARCELOR MITTAL)
 138 HWY 3217
 LAPLACE, LA
 US 70068
 Contact: SERVICE MANAGER

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)

T: (414)541-8700

F: