



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR LH50M 1203-88008
Component
Rear Differential
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		LH0184648	LHMC144351	LHMC130745
Sample Date		Client Info		27 Jun 2021	20 Feb 2021	17 Aug 2018
Machine Age	hrs	Client Info		4041	3069	980
Oil Age	hrs	Client Info		1000	1069	980
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Filter Changed		Client Info		N/A	Not Changd	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	38	24	20
Chromium	ppm	ASTM D5185m	>2	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	0	<1
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>4	<1	<1	0
Aluminum	ppm	ASTM D5185m	>7	<1	<1	<1
Lead	ppm	ASTM D5185m	>4	0	0	<1
Copper	ppm	ASTM D5185m	>135	17	15	28
Tin	ppm	ASTM D5185m	>3	<1	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	LIGHT	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

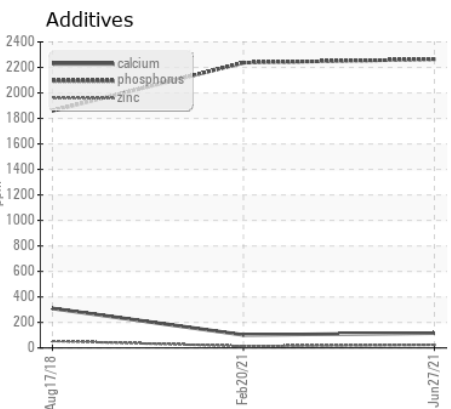
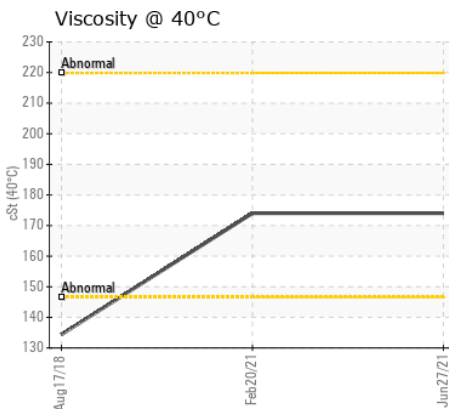
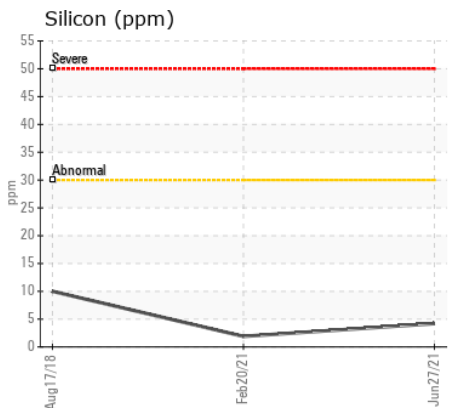
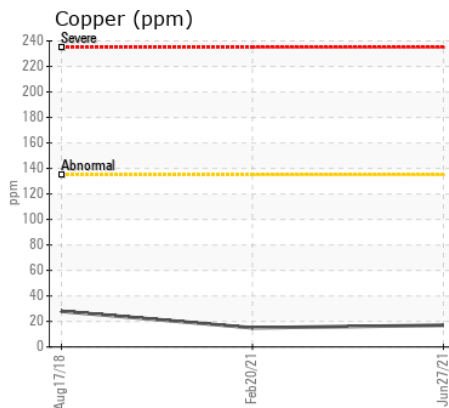
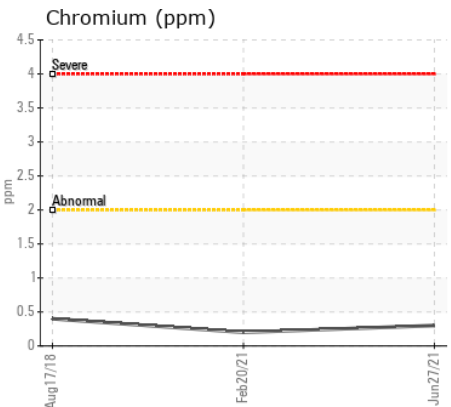
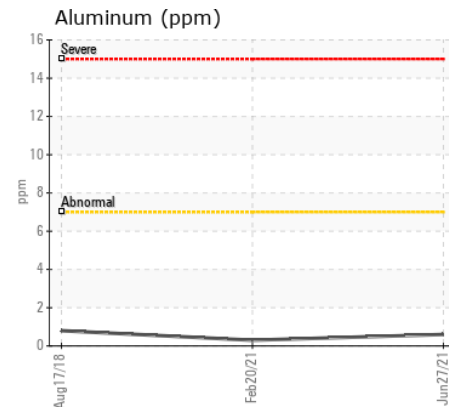
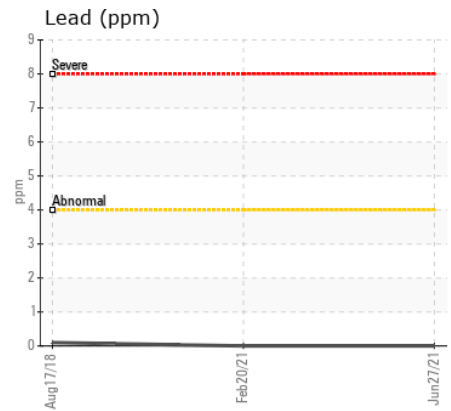
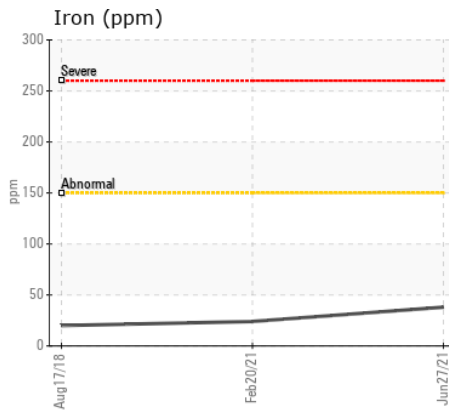
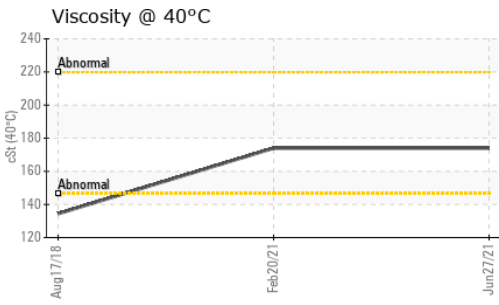
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>30	4	2	10
Potassium	ppm	ASTM D5185m	>20	<1	0	7
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 D5185m		13	10	23
Boron	ppm	ASTM D5185m		26	18	8
Barium	ppm	ASTM D5185m		0	0	2
Molybdenum	ppm	ASTM D5185m		2	1	3
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		3	0	2
Calcium	ppm	ASTM D5185m		116	102	310
Phosphorus	ppm	ASTM D5185m		2264	2237	1860
Zinc	ppm	ASTM D5185m		24	14	54
Sulfur	ppm	ASTM D5185m		24112	24004	20324
Visc @ 40°C	cSt	ASTM D445		174	174	134.4



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LH0184648 **Received** : 12 Jul 2021
Lab Number : 05299640 **Diagnosed** : 13 Jul 2021
Unique Number : 9578600 **Diagnostician** : Don Baldrige
Test Package : MOBCE

JR VINAGRO
 2208 PLAINFIELD PIKE
 JOHNSTON, RI
 US 02919
 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)

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