



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR L556 030505-454
Component
Rear Differential
Fluid
LIEBHERR GEAR BASIC 90 LS (38 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0191157	LHMC129442	LHMC109642
Sample Date		Client Info		12 May 2021	04 Oct 2018	14 Dec 2016
Machine Age	hrs	Client Info		4644	3809	2665
Oil Age	hrs	Client Info		300	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Filter Changed		Client Info		Changed	N/A	N/A
Sample Status				NORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>1000	57	49	117
Chromium	ppm	ASTM D5185m	>10	<1	<1	1
Nickel	ppm	ASTM D5185m	>2	<1	<1	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	0	<1	<1
Lead	ppm	ASTM D5185m	>5	0	0	<1
Copper	ppm	ASTM D5185m	>100	1	1	4
Tin	ppm	ASTM D5185m	>10	0	0	2
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	MODER	LIGHT	▲ HEAVY
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

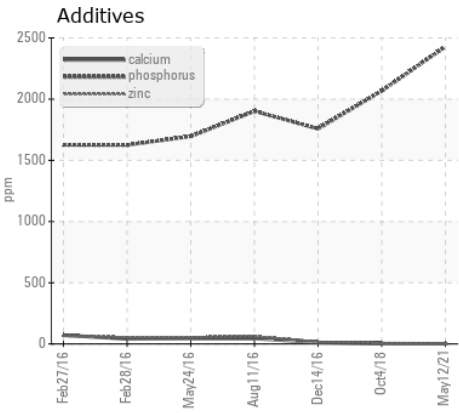
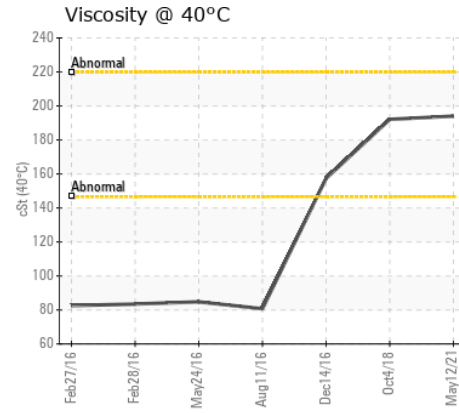
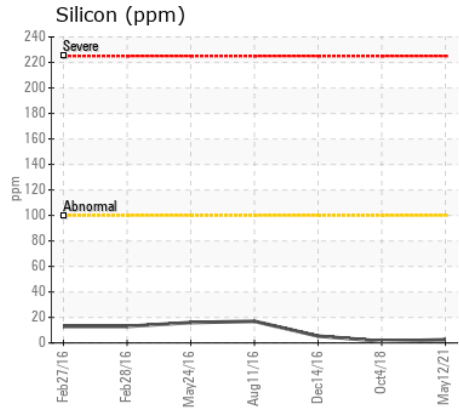
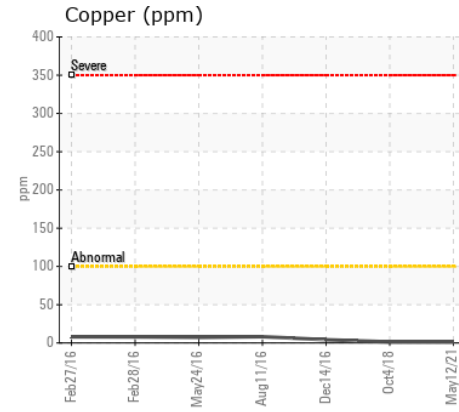
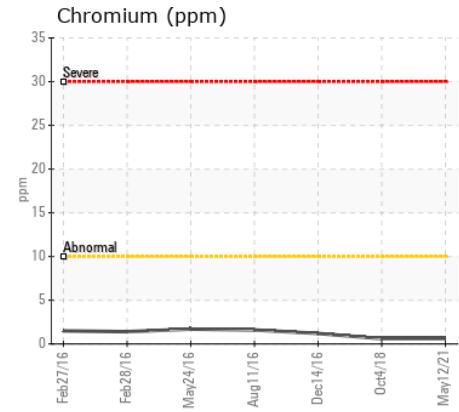
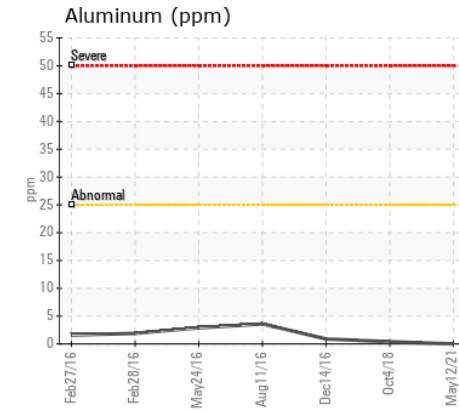
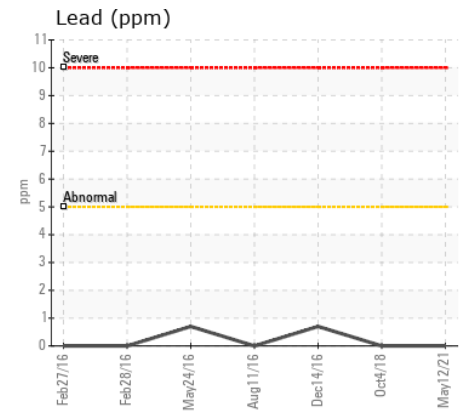
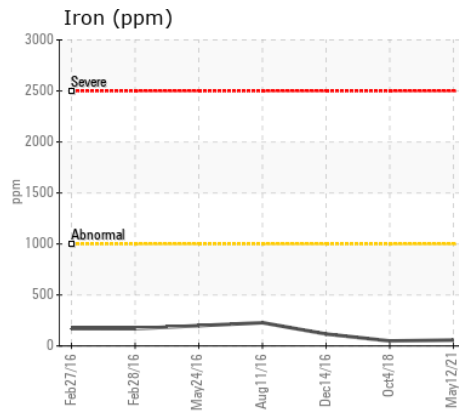
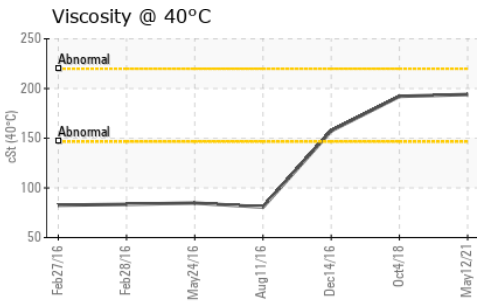
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>100	2	1	5
Potassium	ppm	ASTM D5185m	>20	<1	4	2
Water		WC Method	>.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	>.2	NEG	NEG	NEG

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		3	2	2
Boron	ppm	ASTM D5185m		1	<1	2
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		19	21	83
Manganese	ppm	ASTM D5185m		<1	<1	2
Magnesium	ppm	ASTM D5185m		0	<1	<1
Calcium	ppm	ASTM D5185m		2	3	12
Phosphorus	ppm	ASTM D5185m		2429	2067	1758
Zinc	ppm	ASTM D5185m		0	5	17
Sulfur	ppm	ASTM D5185m		23052	20277	22050
Visc @ 40°C	cSt	ASTM D445		194	192.1	157.4



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LH0191157
Lab Number : 05281459
Unique Number : 9545392
Test Package : MOBCE

JOHNSON BROTHERS PAVING
 1924 N MAIN ST
 LILLINGTON, NC
 US 27546
 Contact: SEAN

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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F: