



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR LH50 1216-118499
Component
Transmission
Fluid
{not provided} (--- GAL)

RECOMMENDATION

The fluid change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0236503	LH0204089	LH0190824
Sample Date		Client Info		23 Aug 2022	02 Mar 2022	14 May 2021
Machine Age	hrs	Client Info		4046	3020	1034
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		Not Changed	N/A	N/A
Sample Status				ABNORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>148	12	13	11
Chromium	ppm	ASTM D5185m	>4	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		9	19	<1
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>5	2	2	3
Lead	ppm	ASTM D5185m	>203	1	<1	1
Copper	ppm	ASTM D5185m	>520	22	29	32
Tin	ppm	ASTM D5185m	>7	1	2	1
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	LIGHT	▲ MODER
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

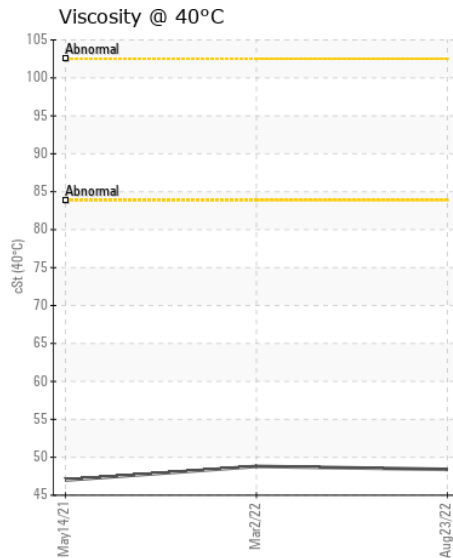
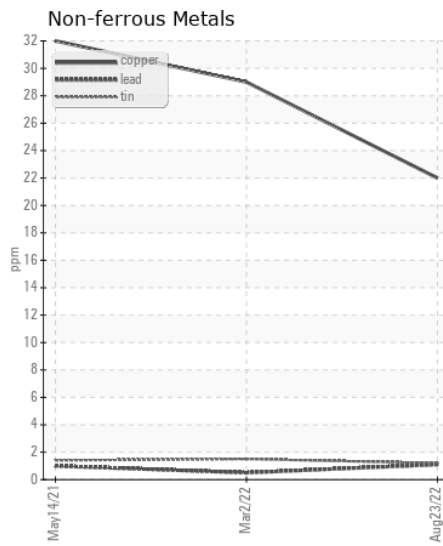
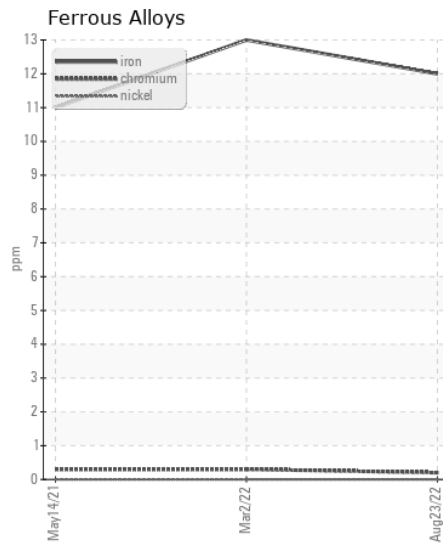
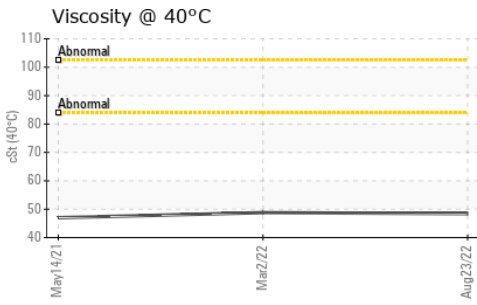
Moderate concentration of visible dirt/debris present in the fluid.

Silicon	ppm	ASTM D5185m	>15	4	4	3
Potassium	ppm	ASTM D5185m	>20	6	6	10
Water		WC Method	>0.1	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	▲ MODER	LIGHT	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	>0.1	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		8	13	38
Boron	ppm	ASTM D5185m		78	52	5
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		3	1	<1
Manganese	ppm	ASTM D5185m		2	6	12
Magnesium	ppm	ASTM D5185m		387	227	12
Calcium	ppm	ASTM D5185m		1616	2295	3218
Phosphorus	ppm	ASTM D5185m		769	1005	1026
Zinc	ppm	ASTM D5185m		908	1097	1147
Sulfur	ppm	ASTM D5185m		3667	4139	8232
Visc @ 40°C	cSt	ASTM D445		48.4	48.8	47.0



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LH0236503
Lab Number : 05632613
Unique Number : 10117134
Test Package : CONST
Received : 01 Sep 2022
Tested : 02 Sep 2022
Diagnosed : 03 Sep 2022 - Don Baldrige

SADOFF IRON AND METAL
 240 ARNDT STREET
 FOND DU LAC, WI
 US 54936
 Contact: DAVE CASPER
 casperd@sadoff.com

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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