



LIEBHERR

OIL ANALYSIS REPORT



Area
RMR-Newport
 Machine Id
1217-97851 LIEBHERR LH60M 1217-97851
 Component
Swing Drive
 Fluid
LIEBHERR GEAR BASIC 90 LS (--- GAL)

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0244700	DJJ0016504	DJJ0011539
Sample Date		Client Info		13 Mar 2024	31 Jan 2023	05 Mar 2022
Machine Age	hrs	Client Info		13914	11593	9734
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	Not Changd	Changed
Filter Changed		Client Info		N/A	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>350	153	64	133
Chromium	ppm	ASTM D5185m	>15	2	<1	1
Nickel	ppm	ASTM D5185m	>5	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>5	2	0	<1
Lead	ppm	ASTM D5185m	>10	<1	0	<1
Copper	ppm	ASTM D5185m	>300	71	40	107
Tin	ppm	ASTM D5185m	>15	8	5	16
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	MODER	VLITE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

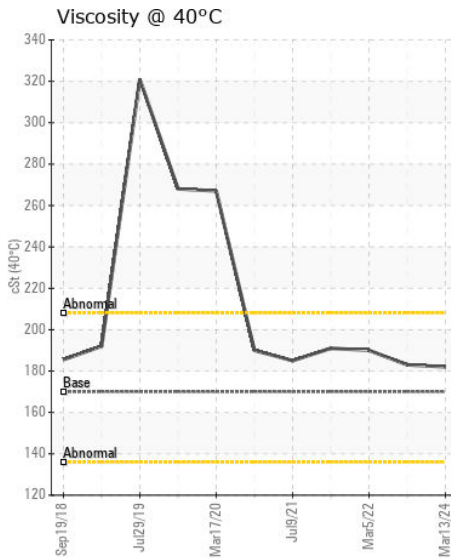
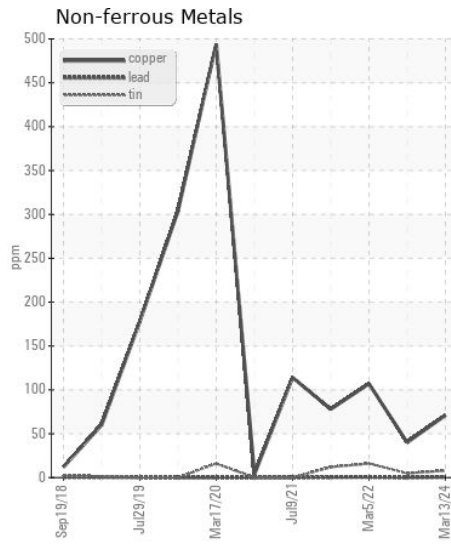
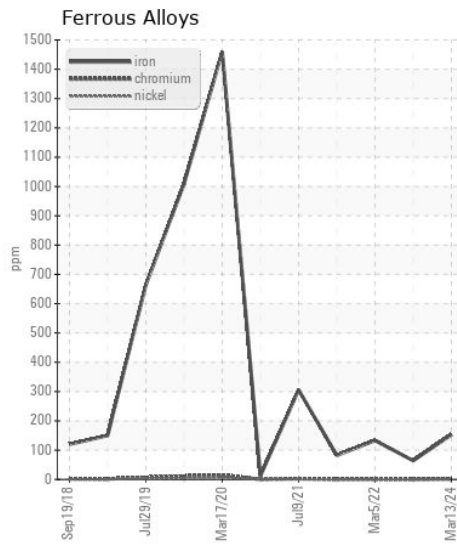
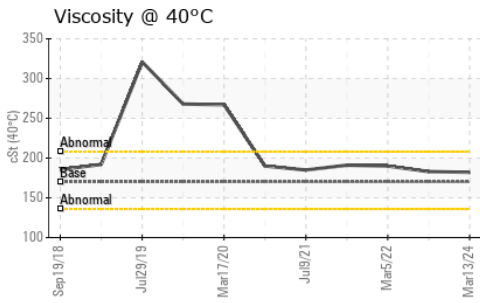
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>15	1	1	2
Potassium	ppm	ASTM D5185m	>20	<1	<1	0
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		2	3	6
Boron	ppm	ASTM D5185m	0	0	3	2
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	<1	<1	<1
Manganese	ppm	ASTM D5185m	0	1	<1	1
Magnesium	ppm	ASTM D5185m	<1	<1	<1	<1
Calcium	ppm	ASTM D5185m	<1	20	16	34
Phosphorus	ppm	ASTM D5185m	2143	2071	2165	2230
Zinc	ppm	ASTM D5185m	<1	9	14	20
Sulfur	ppm	ASTM D5185m	23468	30828	28919	22187
Visc @ 40°C	cSt	ASTM D445	170	182	183	190



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LH0244700
Lab Number : 06124006
Unique Number : 10938157
Test Package : CONST

Received : 20 Mar 2024
Tested : 21 Mar 2024
Diagnosed : 21 Mar 2024 - Wes Davis

RIVER METALS RECYCLING - NEWPORT
 P.O. BOX 72-220
 NEWPORT, KY
 US 41072
 Contact: RYAN BOWDEN

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:
 F: (859)291-0086