



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
LIEBHERR LR 1600/2 CR 6606 (S/N 074 509)

Component
2 Winch

Fluid
ISO 220 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0823342	WC0610452	KLMC106191
Sample Date		Client Info		24 Feb 2024	21 Feb 2022	22 Jan 2013
Machine Age	hrs	Client Info		17237	0	5600
Oil Age	hrs	Client Info		0	0	5600
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Not Changed	Changed	N/A
Sample Status				NORMAL	SEVERE	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	15	42	182
Chromium	ppm	ASTM D5185m	>10	<1	<1	2
Nickel	ppm	ASTM D5185m	>10	<1	0	<1
Titanium	ppm	ASTM D5185m		<1	<1	1
Silver	ppm	ASTM D5185m		0	<1	<1
Aluminum	ppm	ASTM D5185m	>5	<1	1	5
Lead	ppm	ASTM D5185m	>15	<1	<1	0
Copper	ppm	ASTM D5185m	>80	<1	<1	2
Tin	ppm	ASTM D5185m		<1	<1	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	▲ MODER

CONTAMINATION

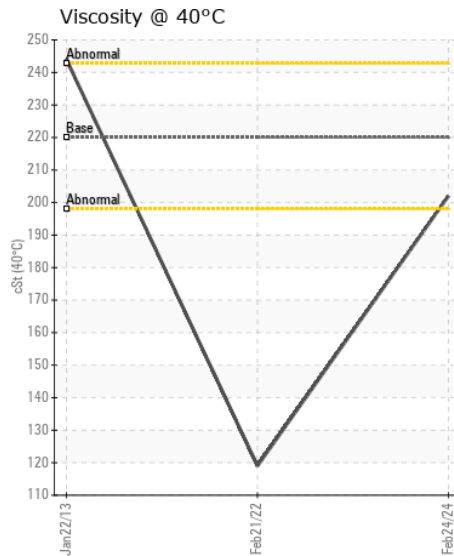
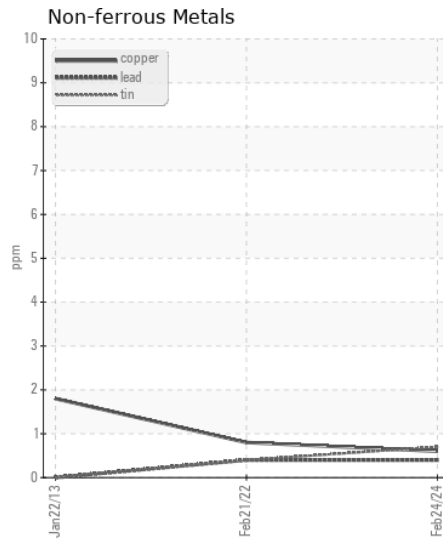
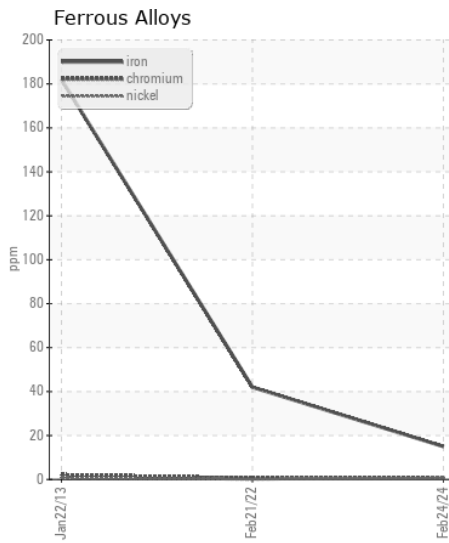
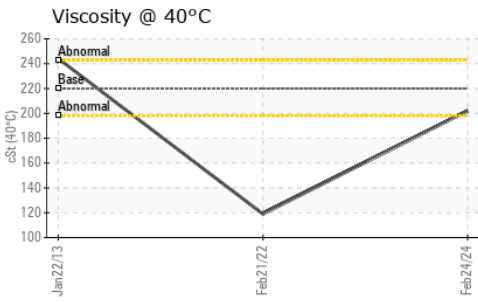
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	4	4	20
Potassium	ppm	ASTM D5185m	>20	1	0	12
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	● MILKY	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	0.2%	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		0	0	10
Boron	ppm	ASTM D5185m		30	71	5
Barium	ppm	ASTM D5185m		1	0	2
Molybdenum	ppm	ASTM D5185m		<1	0	0
Manganese	ppm	ASTM D5185m		1	1	1
Magnesium	ppm	ASTM D5185m		<1	0	2
Calcium	ppm	ASTM D5185m		7	5	14
Phosphorus	ppm	ASTM D5185m		631	1358	438
Zinc	ppm	ASTM D5185m		90	342	12
Sulfur	ppm	ASTM D5185m		8735	20797	61
Visc @ 40°C	cSt	ASTM D445	220	202	● 119	244.0



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0823342
Lab Number : 06103858
Unique Number : 10902088
Test Package : CONST

Received : 28 Feb 2024
Tested : 29 Feb 2024
Diagnosed : 01 Mar 2024 - Don Baldrige

BUCKNER HEAVY LIFT
 4732 NC 54 EAST
 GRAHAM, NC
 US 27253-9215

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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)