



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
RMR-Newport
Machine Id
024533-791 LIEBHERR R944C 024533-791
Component
Swing Drive
Fluid
LIEBHERR GEAR BASIC 90 LS (--- GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DJJ0017806	DJJ0017628	DJJ0016534
Sample Date		Client Info		14 Jun 2024	29 Mar 2023	20 Jul 2022
Machine Age	hrs	Client Info		9864	8896	8262
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Not Changed
Filter Changed		Client Info		N/A	Changed	Changed
Sample Status				ABNORMAL	SEVERE	SEVERE

WEAR

Bearing and/or gear wear is indicated.

Iron	ppm	ASTM D5185m	>750	305	▲ 1311	598
Chromium	ppm	ASTM D5185m	>10	3	4	3
Nickel	ppm	ASTM D5185m	>5	2	1	<1
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	4	2
Lead	ppm	ASTM D5185m	>5	<1	▲ 10	<1
Copper	ppm	ASTM D5185m	>250	120	▲ 1162	▲ 515
Tin	ppm	ASTM D5185m	>10	▲ 12	▲ 99	▲ 54
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	MODER
Yellow Metal	scalar	*Visual	NONE	NONE	▲ MODER	NONE

CONTAMINATION

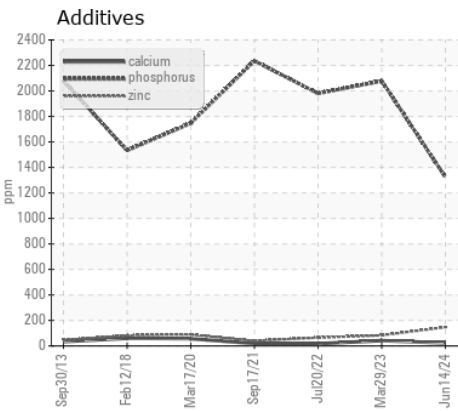
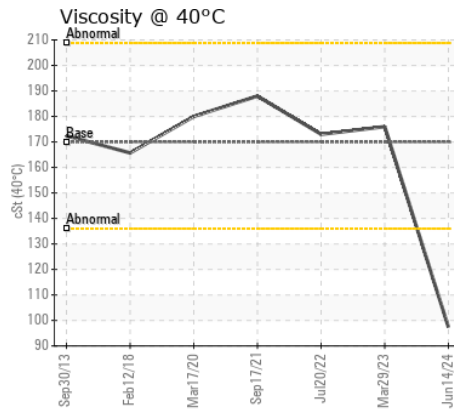
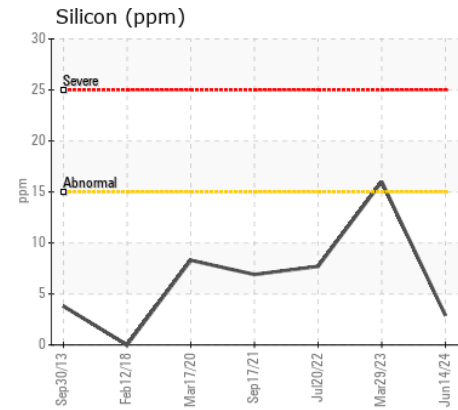
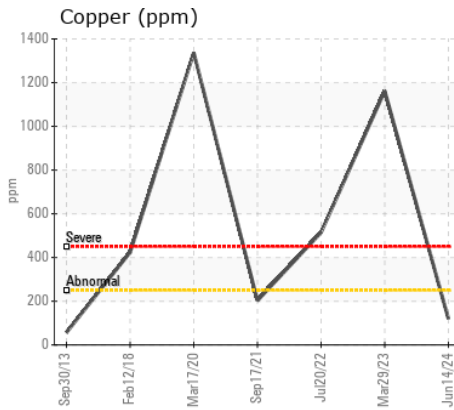
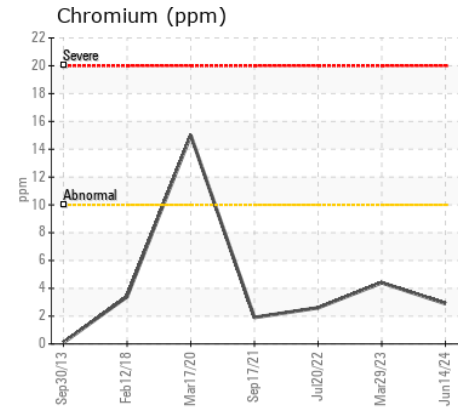
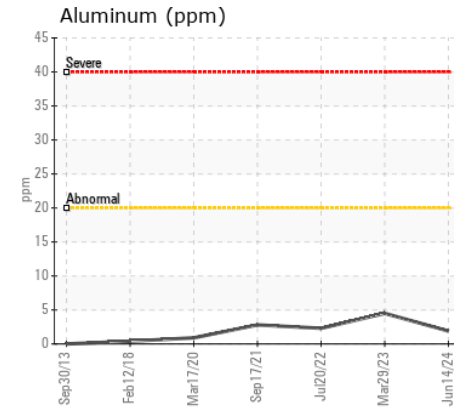
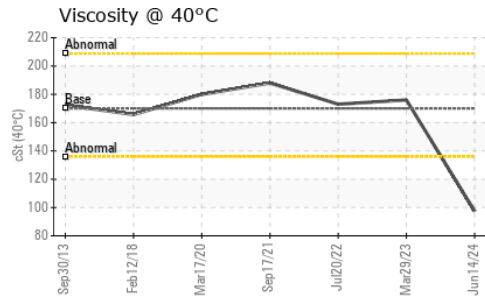
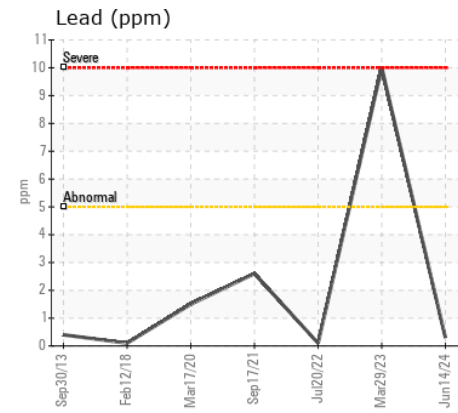
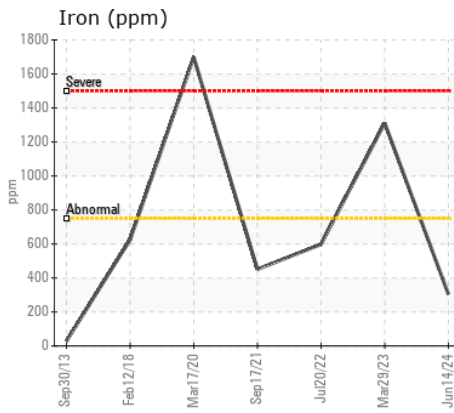
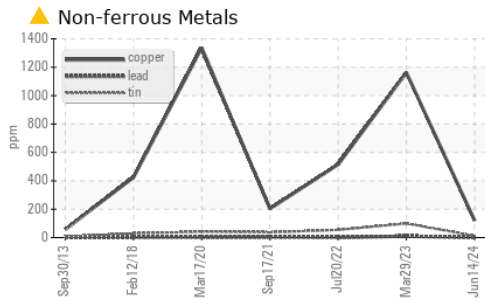
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>15	3	16	8
Potassium	ppm	ASTM D5185m	>20	<1	0	1
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		0	3	1
Boron	ppm	ASTM D5185m	0	<1	0	2
Barium	ppm	ASTM D5185m	0	<1	0	0
Molybdenum	ppm	ASTM D5185m	0	1	1	<1
Manganese	ppm	ASTM D5185m	0	2	8	4
Magnesium	ppm	ASTM D5185m	<1	3	6	2
Calcium	ppm	ASTM D5185m	<1	23	42	18
Phosphorus	ppm	ASTM D5185m	2143	1324	2078	1980
Zinc	ppm	ASTM D5185m	<1	147	83	65
Sulfur	ppm	ASTM D5185m	23468	17109	25056	28087
Visc @ 40°C	cSt	ASTM D445	170	97.4	176	173



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DJJ0017806
Lab Number : 06215171
Unique Number : 11088035
Test Package : MOBCE

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)

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 F: (859)291-0086