



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
RMR-Newport
Machine Id
23617 LIEBHERR A934C 040933-1007
Component
Front Right Wheel Hub
Fluid
GEAR OIL SAE 80W90 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DJJ0017645	DJJ0016259	DJJ0004063
Sample Date		Client Info		24 May 2024	15 Feb 2023	23 Sep 2021
Machine Age	hrs	Client Info		13856	12299	10715
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	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>550	42	61	70
Chromium	ppm	ASTM D5185m	>4	0	<1	<1
Nickel	ppm	ASTM D5185m	>3	0	0	0
Titanium	ppm	ASTM D5185m	>50	0	0	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>15	<1	<1	<1
Lead	ppm	ASTM D5185m	>20	0	0	<1
Copper	ppm	ASTM D5185m	>95	3	4	8
Tin	ppm	ASTM D5185m	>4	0	0	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	LIGHT	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

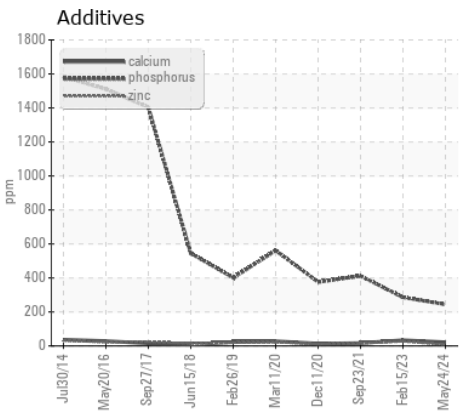
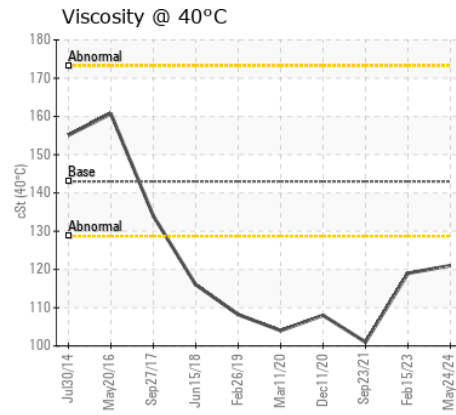
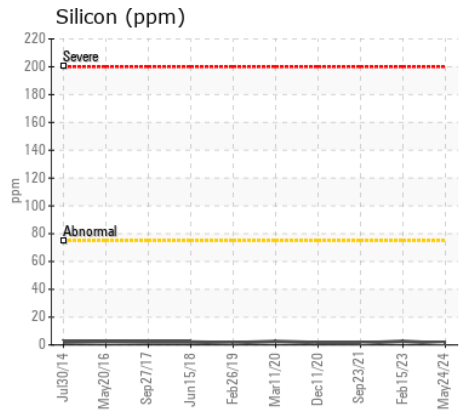
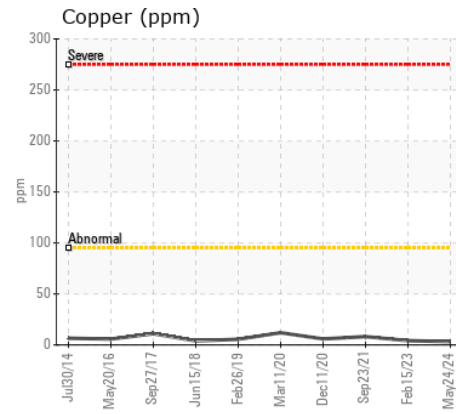
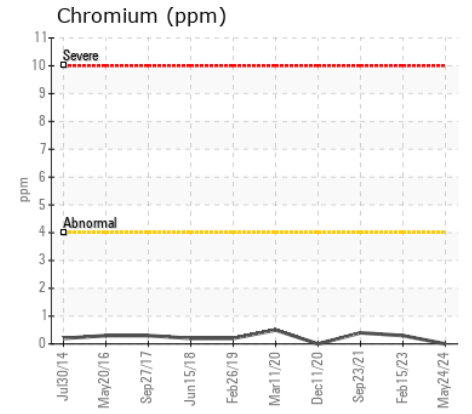
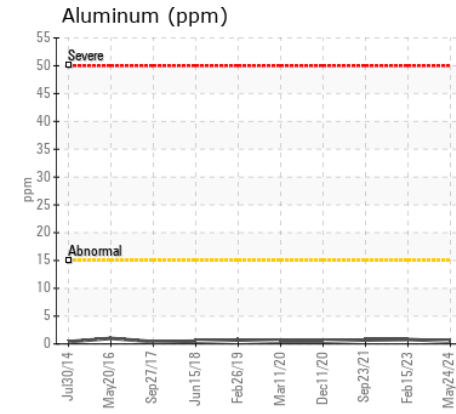
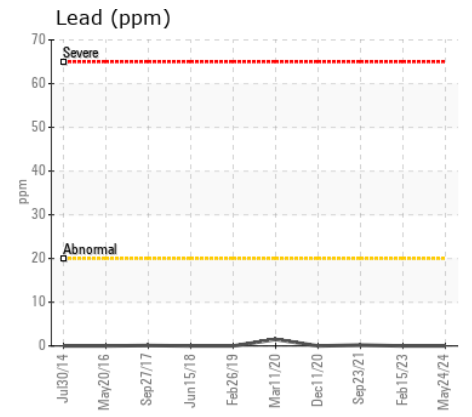
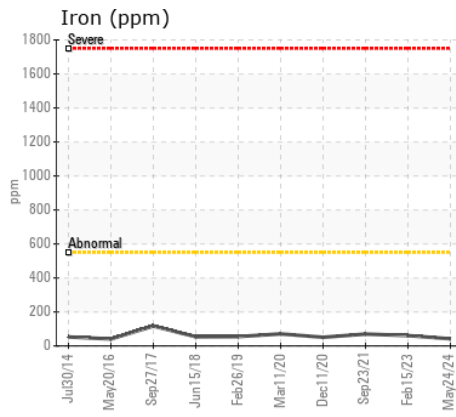
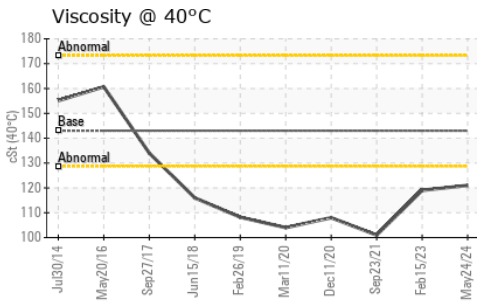
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	1	3	1
Potassium	ppm	ASTM D5185m	>20	1	2	2
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	>170	0	0	1
Boron	ppm	ASTM D5185m	400	0	3	8
Barium	ppm	ASTM D5185m	200	0	0	0
Molybdenum	ppm	ASTM D5185m	12	0	2	<1
Manganese	ppm	ASTM D5185m		<1	<1	1
Magnesium	ppm	ASTM D5185m	12	4	6	7
Calcium	ppm	ASTM D5185m	150	22	34	17
Phosphorus	ppm	ASTM D5185m	1650	244	286	412
Zinc	ppm	ASTM D5185m	125	8	27	15
Sulfur	ppm	ASTM D5185m	22500	15928	17526	12796
Visc @ 40°C	cSt	ASTM D445	143	121	119	101



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DJJ0017645
Lab Number : 06197128
Unique Number : 11059251
Test Package : MOBCE

Received : 31 May 2024
Tested : 03 Jun 2024
Diagnosed : 04 Jun 2024 - Don Baldrige

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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