



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
AMR-Topeka
Machine Id
17593 LIEBHERR R934CHD 056656-1007
Component
Splitter Box
Fluid
LIEBHERR GEAR BASIC 90 LS (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DJJ0018418	DJJ037366	DJJ037500
Sample Date		Client Info		06 Feb 2024	31 Mar 2021	06 Jan 2020
Machine Age	hrs	Client Info		15401	12097	10325
Oil Age	hrs	Client Info		250	250	250
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	16	56	77
Chromium	ppm	ASTM D5185m	>5	0	<1	<1
Nickel	ppm	ASTM D5185m	>5	0	<1	<1
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	1	6	12
Lead	ppm	ASTM D5185m	>30	0	<1	0
Copper	ppm	ASTM D5185m	>20	<1	2	<1
Tin	ppm	ASTM D5185m	>10	<1	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	LIGHT	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

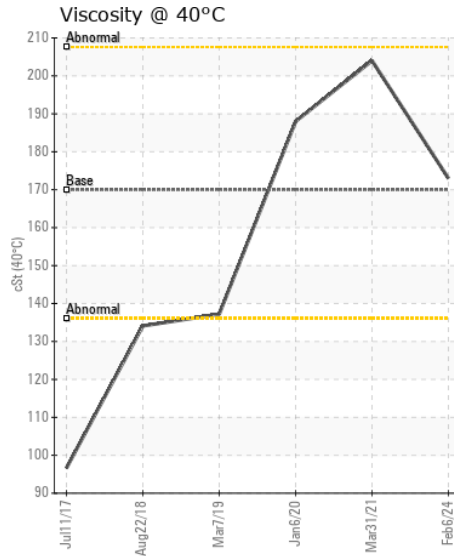
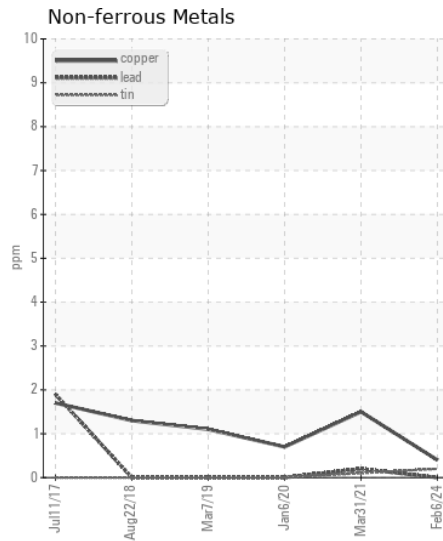
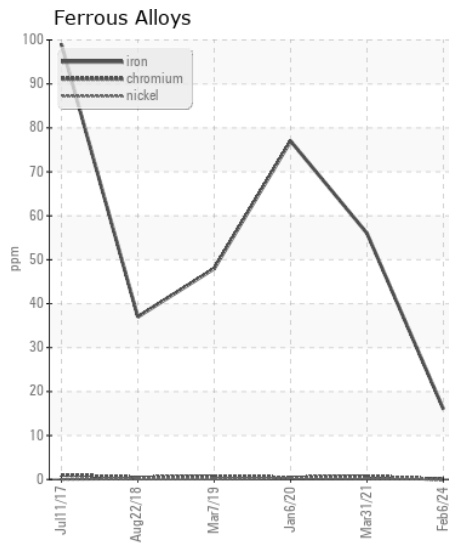
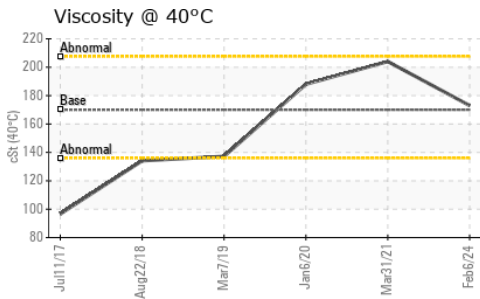
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>30	2	<1	4
Potassium	ppm	ASTM D5185m	>20	0	4	13
Water		WC Method	>0.1	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	>0.1	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m	>25	0	1	4
Boron	ppm	ASTM D5185m	0	3	20	12
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	<1	0
Manganese	ppm	ASTM D5185m	0	<1	2	3
Magnesium	ppm	ASTM D5185m	<1	0	1	0
Calcium	ppm	ASTM D5185m	<1	8	9	4
Phosphorus	ppm	ASTM D5185m	2143	2204	1938	2039
Zinc	ppm	ASTM D5185m	<1	43	54	35
Sulfur	ppm	ASTM D5185m	23468	25576	22882	24083
Visc @ 40°C	cSt	ASTM D445	170	173	204	188



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DJJ0018418
Lab Number : 06087797
Unique Number : 10875242
Test Package : CONST

Received : 13 Feb 2024
Tested : 14 Feb 2024
Diagnosed : 14 Feb 2024 - Wes Davis

ADVANTAGE METALS RECYCLING - TOPEKA
 1628 NW GORDON ST
 TOPEKA, KS
 US 66608

Contact: SETH WATSON
 SETH.WATSON@ADVANTAGERECYCLING.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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