



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
AMR-Cheyenne
 Machine Id
143343-1217 LIEBHERR LH60M 143343-1217
 Component
Rear Left Wheel Hub
 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		DJJ0020047	DJJ0018382	DJJ0017302
Sample Date		Client Info		21 Jun 2024	19 Mar 2024	07 Dec 2023
Machine Age	hrs	Client Info		3196	2527	1893
Oil Age	hrs	Client Info		0	500	500
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	>650	17	12	19
Chromium	ppm	ASTM D5185m	>4	0	<1	0
Nickel	ppm	ASTM D5185m	>4	0	<1	0
Titanium	ppm	ASTM D5185m	>4	0	<1	0
Silver	ppm	ASTM D5185m		<1	<1	0
Aluminum	ppm	ASTM D5185m	>25	0	2	0
Lead	ppm	ASTM D5185m	>4	<1	<1	0
Copper	ppm	ASTM D5185m	>60	3	2	3
Tin	ppm	ASTM D5185m	>4	0	1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	MODER	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

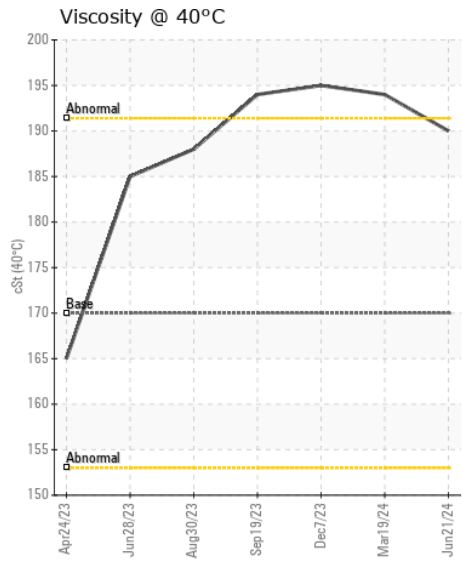
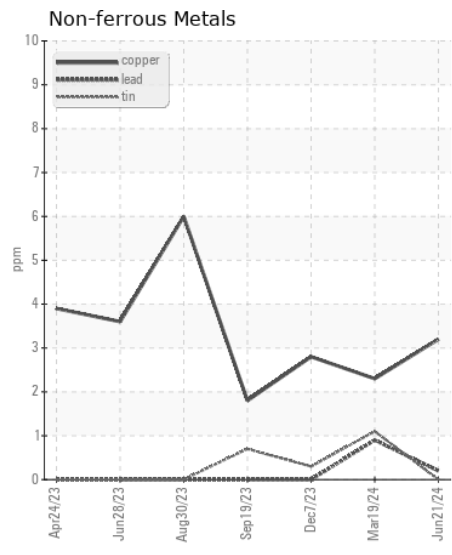
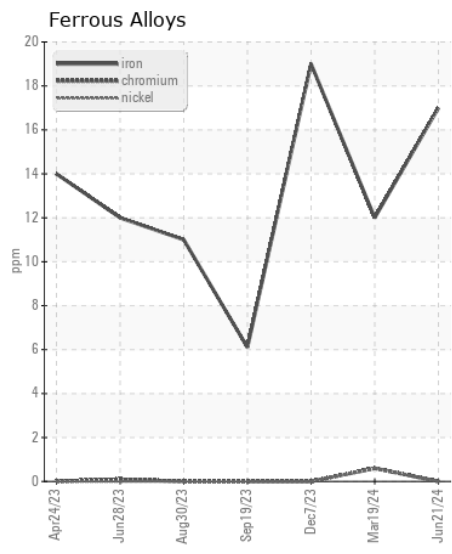
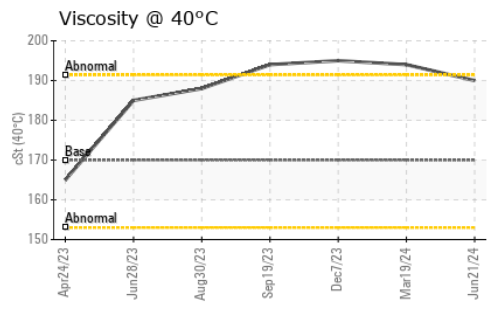
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	<1	2	4
Potassium	ppm	ASTM D5185m	>20	<1	1	<1
Water		WC Method	>0.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	LIGHT
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	0	<1
Boron	ppm	ASTM D5185m	0	<1	0	4
Barium	ppm	ASTM D5185m	0	0	1	0
Molybdenum	ppm	ASTM D5185m	0	0	<1	0
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	<1	0	<1	0
Calcium	ppm	ASTM D5185m	<1	5	7	0
Phosphorus	ppm	ASTM D5185m	2143	2618	2256	2282
Zinc	ppm	ASTM D5185m	<1	8	5	0
Sulfur	ppm	ASTM D5185m	23468	33269	28514	27916
Visc @ 40°C	cSt	ASTM D445	170	190	194	195



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DJJ0020047
Lab Number : 06222922
Unique Number : 11101119
Test Package : CONST

Received : 27 Jun 2024
Tested : 28 Jun 2024
Diagnosed : 28 Jun 2024 - Wes Davis

ADVANTAGE METALS RECYCLING - CHEYENNE
 1015 S. PACKARD ST
 KANSAS CITY, KS
 US 66105
 Contact: BRIAN JACOBS
 BRIAN.JACOBS@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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