



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
TMR-Sarasota
Machine Id
23818 LIEBHERR A934 1006-38725
Component
Rear Differential
Fluid
GEAR OIL SAE 85W140 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DJJ0023208	DJJ0008523	DJJ022016
Sample Date		Client Info		14 Jun 2024	19 Jan 2023	05 May 2017
Machine Age	hrs	Client Info		18889	18127	11232
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	N/A	N/A
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	>190	110	103	6
Chromium	ppm	ASTM D5185m	>2	<1	<1	0
Nickel	ppm	ASTM D5185m	>2	<1	<1	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>5	2	<1	0
Lead	ppm	ASTM D5185m	>15	<1	<1	0
Copper	ppm	ASTM D5185m	>70	14	11	1
Tin	ppm	ASTM D5185m	>2	0	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	LIGHT	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

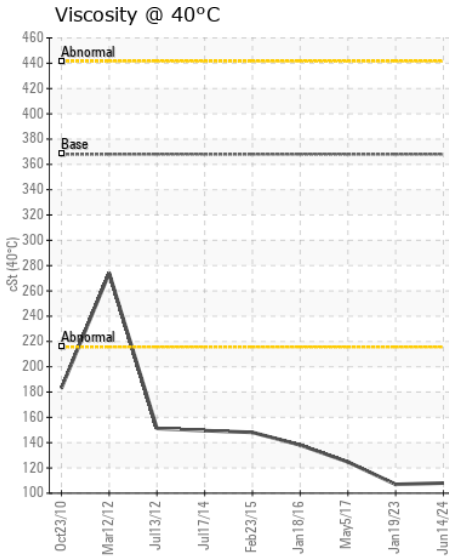
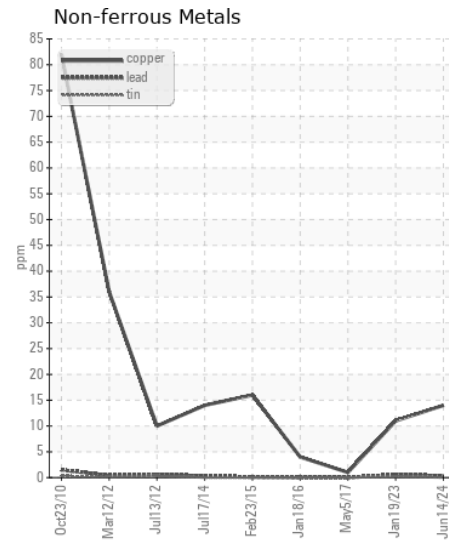
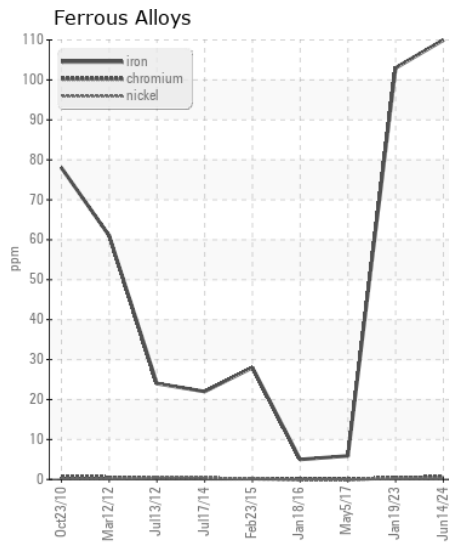
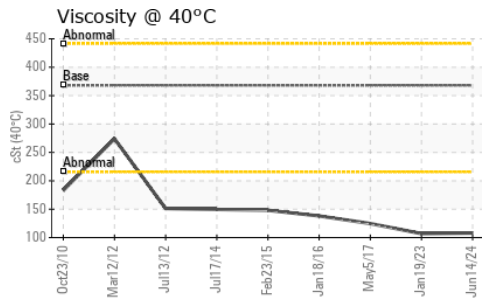
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	2	3	<1
Potassium	ppm	ASTM D5185m	>20	2	2	<1
Water		WC Method	>.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	LIGHT	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT	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	>.2	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		0	<1	<1
Boron	ppm	ASTM D5185m	400	2	0	1
Barium	ppm	ASTM D5185m	200	0	0	<1
Molybdenum	ppm	ASTM D5185m	12	0	<1	<1
Manganese	ppm	ASTM D5185m		2	2	<1
Magnesium	ppm	ASTM D5185m	12	2	<1	0
Calcium	ppm	ASTM D5185m	150	28	7	4
Phosphorus	ppm	ASTM D5185m	1650	753	738	658
Zinc	ppm	ASTM D5185m	125	49	28	6
Sulfur	ppm	ASTM D5185m	22500	10514	13321	12195
Visc @ 40°C	cSt	ASTM D445	368	108	107	124.7



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DJJ0023208
Lab Number : 06216172
Unique Number : 11089036
Test Package : CONST

Received : 20 Jun 2024
Tested : 21 Jun 2024
Diagnosed : 23 Jun 2024 - Don Baldrige

TRADEMARK METALS RECYCLING - SARASOTA - MYRTLE ST
 1735 MYRTLE STREET
 SARASOTA, FL
 US 34234
 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)

T:
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