



PROBLEM SUMMARY

Sample Rating Trend

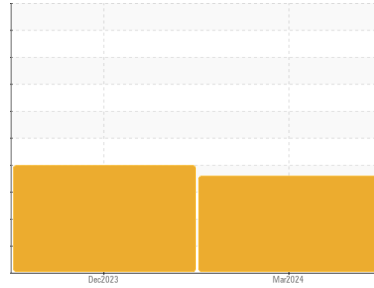
ISO



Machine Id
927071-223253

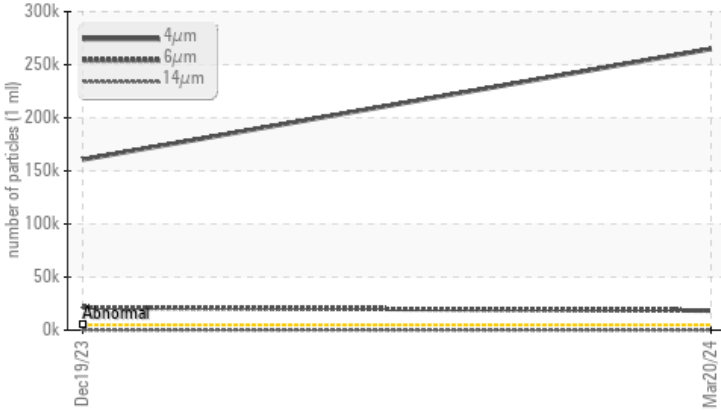
Component
Hydraulic System

Fluid
AW HYDRAULIC OIL ISO 46 (--- GAL)



COMPONENT CONDITION SUMMARY

▲ Particle Trend



RECOMMENDATION

Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend you service the filters on this component. Resample in 30-45 days to monitor this situation. Please specify the brand, type, and viscosity of the oil on your next sample.

PROBLEMATIC TEST RESULTS

Sample Status			SEVERE	SEVERE	---
Particles >4µm	ASTM D7647	>5000	▲ 264908	▲ 160639	---
Particles >6µm	ASTM D7647	>1300	▲ 18435	▲ 21461	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 25/21/13	▲ 25/22/15	---

Customer Id: GFL823
 Sample No.: GFL0065704
 Lab Number: 06131957
 Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Wes Davis +1 905-569-8600 x223
wesd@wearcheck.ca

To change component or sample information:
 Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We recommend you service the filters on this component.
Resample	---	---	?	Resample in 30-45 days to monitor this situation.
Information Required	---	---	?	Please specify the brand, type, and viscosity of the oil on your next sample.
Check Breathers	---	---	?	The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather.
Check Seals	---	---	?	Check seals and/or filters for points of contaminant entry.

HISTORICAL DIAGNOSIS

ISO



19 Dec 2023 Diag: Wes Davis

Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend you service the filters on this component. Resample in 30-45 days to monitor this situation. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) AW HYDRAULIC OIL ISO 46. Please confirm.

All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

view report





OIL ANALYSIS REPORT

Sample Rating Trend

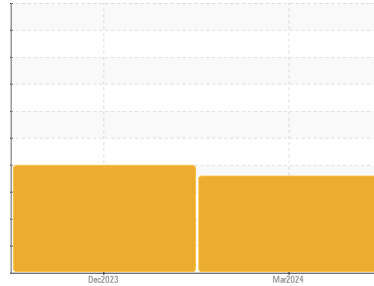
ISO



Machine Id
927071-223253

Component
Hydraulic System

Fluid
AW HYDRAULIC OIL ISO 46 (--- GAL)



DIAGNOSIS

▲ Recommendation

Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend you service the filters on this component. Resample in 30-45 days to monitor this situation. Please specify the brand, type, and viscosity of the oil on your next sample.

Wear

All component wear rates are normal.

▲ Contamination

There is a high amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0065704	GFL0065693	---
Sample Date	Client Info	20 Mar 2024	19 Dec 2023	---
Machine Age	mls	Client Info	0	0
Oil Age	mls	Client Info	0	0
Oil Changed	Client Info	Not Changed	N/A	---
Sample Status		SEVERE	SEVERE	---

CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method >0.1	NEG	NEG	---

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >20	9	10	---
Chromium	ppm ASTM D5185m >10	3	3	---
Nickel	ppm ASTM D5185m >10	1	0	---
Titanium	ppm ASTM D5185m	<1	<1	---
Silver	ppm ASTM D5185m	0	0	---
Aluminum	ppm ASTM D5185m >10	2	2	---
Lead	ppm ASTM D5185m >10	0	0	---
Copper	ppm ASTM D5185m >75	1	1	---
Tin	ppm ASTM D5185m >10	<1	0	---
Vanadium	ppm ASTM D5185m	0	0	---
Cadmium	ppm ASTM D5185m	0	0	---

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 5	0	0	---
Barium	ppm ASTM D5185m 5	0	0	---
Molybdenum	ppm ASTM D5185m 5	2	2	---
Manganese	ppm ASTM D5185m	<1	0	---
Magnesium	ppm ASTM D5185m 25	21	22	---
Calcium	ppm ASTM D5185m 200	117	105	---
Phosphorus	ppm ASTM D5185m 300	292	367	---
Zinc	ppm ASTM D5185m 370	443	443	---
Sulfur	ppm ASTM D5185m 2500	1055	981	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >20	3	2	---
Sodium	ppm ASTM D5185m	6	3	---
Potassium	ppm ASTM D5185m >20	3	3	---

FLUID CLEANLINESS

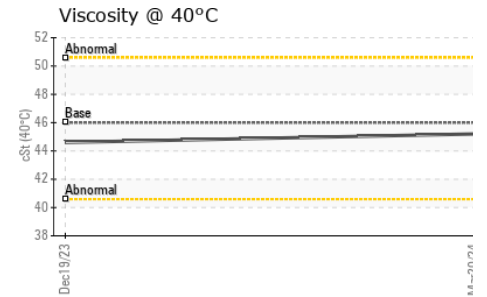
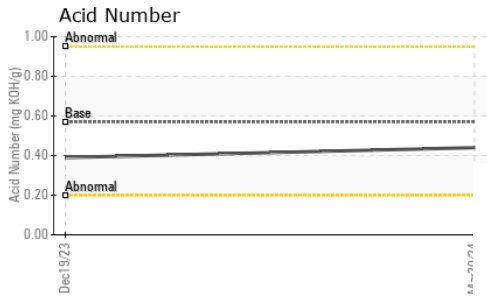
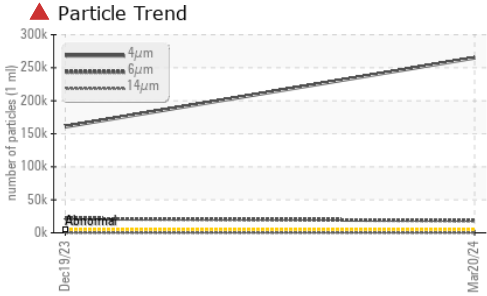
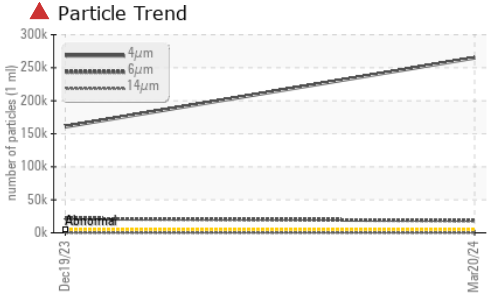
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	▲ 264908	▲ 160639	---
Particles >6µm	ASTM D7647 >1300	▲ 18435	▲ 21461	---
Particles >14µm	ASTM D7647 >160	69	● 166	---
Particles >21µm	ASTM D7647 >40	16	26	---
Particles >38µm	ASTM D7647 >10	0	0	---
Particles >71µm	ASTM D7647 >3	0	0	---
Oil Cleanliness	ISO 4406 (c) >19/17/14	▲ 25/21/13	▲ 25/22/15	---

FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045 0.57	0.44	0.39	---



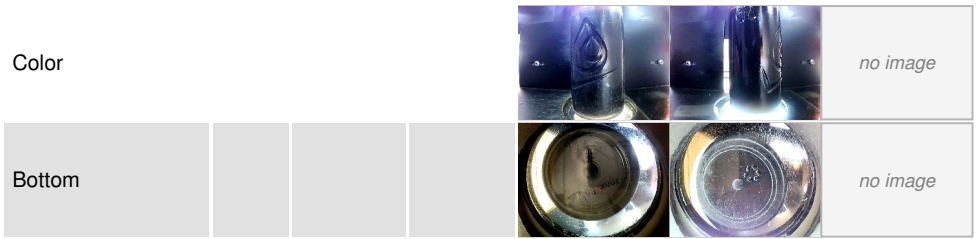
OIL ANALYSIS REPORT



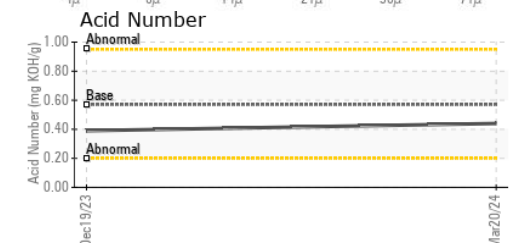
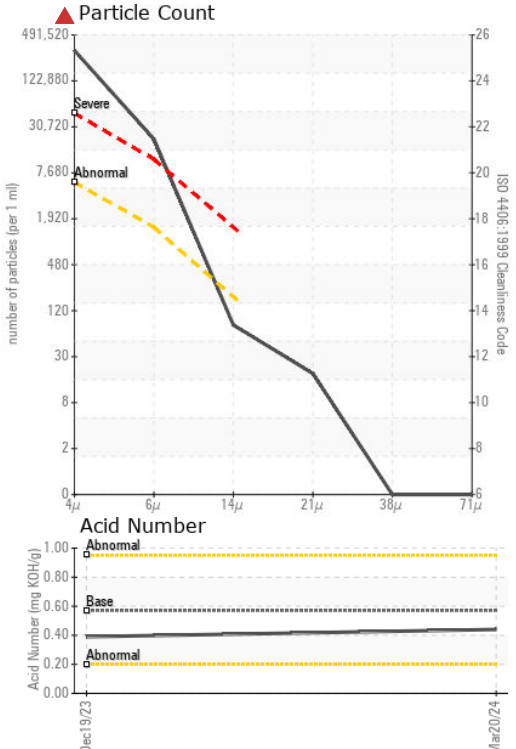
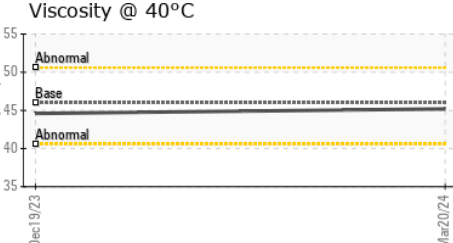
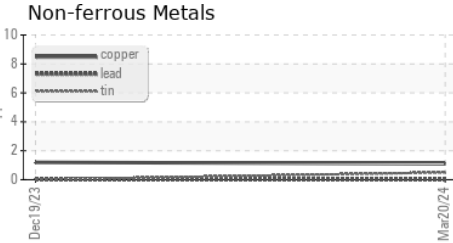
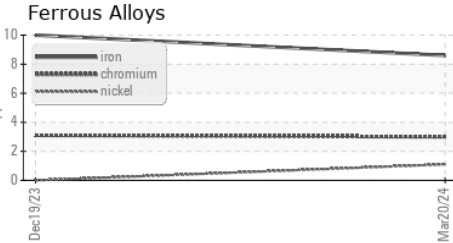
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.1	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 46	45.2	44.6	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0065704 **Received** : 28 Mar 2024
Lab Number : 06131957 **Tested** : 29 Mar 2024
Unique Number : 10951422 **Diagnosed** : 29 Mar 2024 - Wes Davis
Test Package : FLEET (Additional Tests: PrtCount)

GFL Environmental - 823 - Central Missouri Hauling
 24461 Oak Grove Lane
 Sedalia, MO
 US 65301
 Contact: Terry Randolph
 trandolph@gflenv.com
 T: (660)631-2116
 F:

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)