



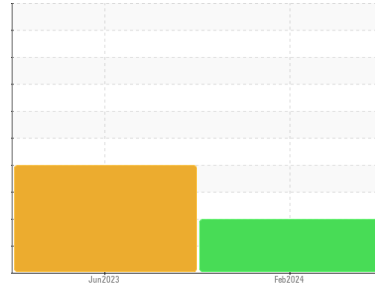
OIL ANALYSIS REPORT

Sample Rating Trend

ISO



Machine Id
OR1974
Component
Hydraulic System
Fluid
CAT TO-4 SAE 10W30 (48 LTR)



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. The filter change at the time of sampling has been noted. Resample in 30-45 days to monitor this situation.

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 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		GFL0113369	GFL0056412	---
Sample Date	Client Info		22 Feb 2024	15 Jun 2023	---
Machine Age	hrs	Client Info	20139	20139	---
Oil Age	hrs	Client Info	500	1000	---
Oil Changed	Client Info		Filtered	Not Changd	---
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 D5185(m) >20	12	13	---
Chromium	ppm	ASTM D5185(m) >10	2	3	---
Nickel	ppm	ASTM D5185(m) >10	<1	0	---
Titanium	ppm	ASTM D5185(m)	0	<1	---
Silver	ppm	ASTM D5185(m)	0	<1	---
Aluminum	ppm	ASTM D5185(m) >10	1	2	---
Lead	ppm	ASTM D5185(m) >10	<1	1	---
Copper	ppm	ASTM D5185(m) >75	5	5	---
Tin	ppm	ASTM D5185(m) >10	0	0	---
Antimony	ppm	ASTM D5185(m)	0	0	---
Vanadium	ppm	ASTM D5185(m)	0	0	---
Beryllium	ppm	ASTM D5185(m)	0	0	---
Cadmium	ppm	ASTM D5185(m)	0	0	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	31	35	---
Barium	ppm	ASTM D5185(m)	0	0	---
Molybdenum	ppm	ASTM D5185(m)	22	23	---
Manganese	ppm	ASTM D5185(m)	0	<1	---
Magnesium	ppm	ASTM D5185(m)	279	289	---
Calcium	ppm	ASTM D5185(m)	1078	1099	---
Phosphorus	ppm	ASTM D5185(m)	820	899	---
Zinc	ppm	ASTM D5185(m)	965	996	---
Sulfur	ppm	ASTM D5185(m)	2096	2181	---
Lithium	ppm	ASTM D5185(m)	<1	<1	---

CONTAMINANTS

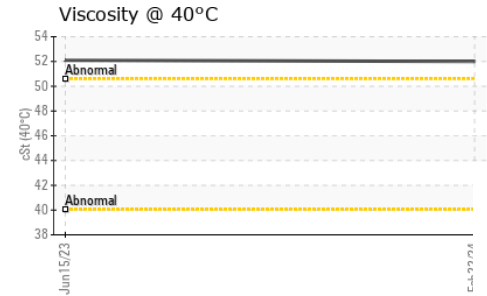
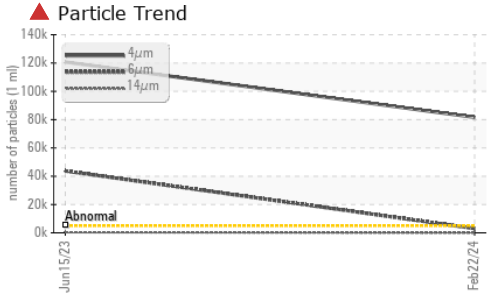
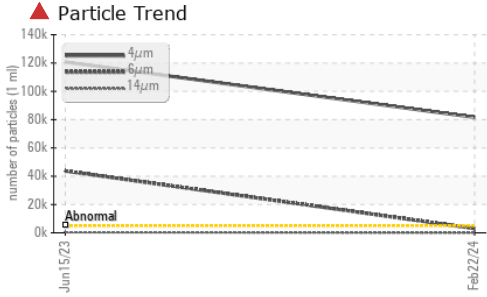
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Silicon	ppm	ASTM D5185(m) >20	5	7	---
Sodium	ppm	ASTM D5185(m)	1	2	---
Potassium	ppm	ASTM D5185(m) >20	0	<1	---

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	▲ 81605	▲ 120714	---
Particles >6µm	ASTM D7647	>1300	▲ 3035	▲ 43713	---
Particles >14µm	ASTM D7647	>160	5	▲ 413	---
Particles >21µm	ASTM D7647	>40	2	33	---
Particles >38µm	ASTM D7647	>10	1	1	---
Particles >71µm	ASTM D7647	>3	1	0	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 24/19/10	▲ 24/23/16	---



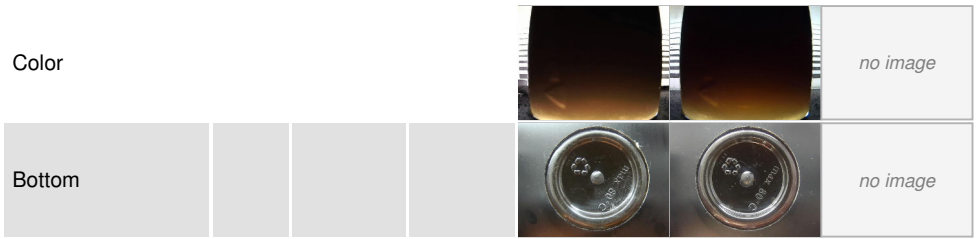
OIL ANALYSIS REPORT



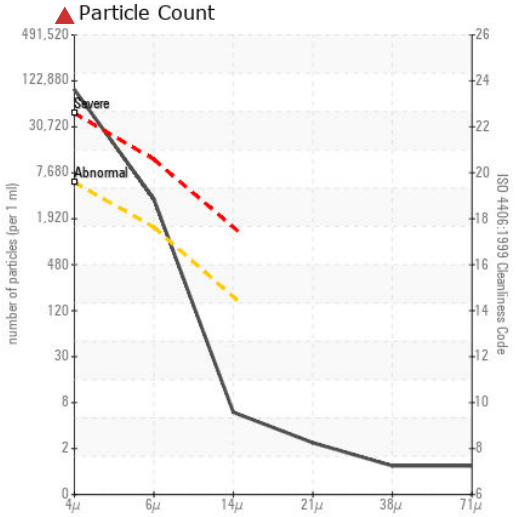
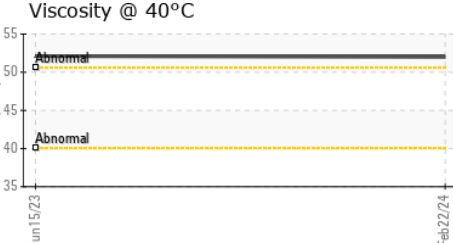
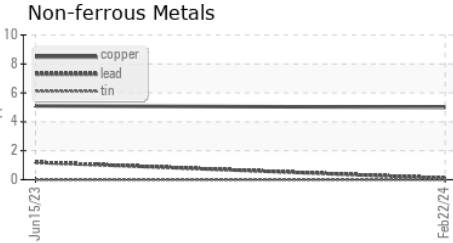
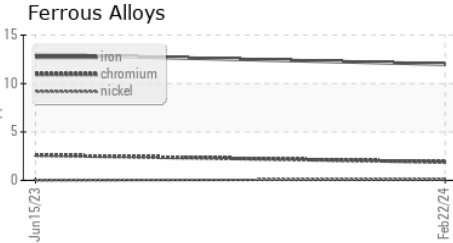
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	---
Precipitate	scalar	Visual*	NONE	NONE	---
Silt	scalar	Visual*	NONE	NONE	---
Debris	scalar	Visual*	NONE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---
Appearance	scalar	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 D7279(m)	52.0	52.1	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0113369 **Received** : 21 Mar 2024
Lab Number : 02623757 **Tested** : 22 Mar 2024
Unique Number : 5748876 **Diagnosed** : 22 Mar 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: PrtCount)

GFL Environmental - 720 - Lafleche - Landfill
 17125 Lafleche Road,
 Moose Creek, ON
 CA K0C 1W0
 Contact: Charles Bergeron
 cbergeron@gflenv.com
 T: (613)538-4853
 F:

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.