

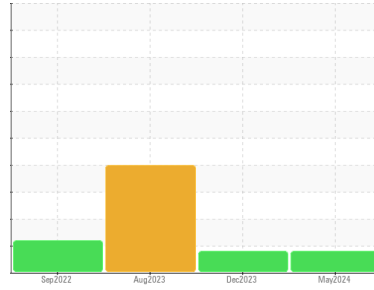


OIL ANALYSIS REPORT



Machine Id
OR872
 Component
Hydraulic System
 Fluid
CAT TDTO 10W (--- GAL)

Sample Rating Trend



ISO



DIAGNOSIS

Recommendation

The filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

There is a moderate 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	GFL0100561	GFL0100646	GFL0077026
Sample Date	Client Info	20 May 2024	01 Dec 2023	10 Aug 2023
Machine Age	hrs	22057	21348	20882
Oil Age	hrs	2000	1726	1260
Oil Changed	Client Info	Not Changed	Not Changed	Not Changed
Sample Status		ABNORMAL	ATTENTION	SEVERE

CONTAMINATION

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

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m) >20	13	12	37
Chromium	ppm ASTM D5185(m) >10	<1	<1	<1
Nickel	ppm ASTM D5185(m) >10	0	<1	<1
Titanium	ppm ASTM D5185(m)	<1	0	0
Silver	ppm ASTM D5185(m)	0	<1	0
Aluminum	ppm ASTM D5185(m) >10	2	2	2
Lead	ppm ASTM D5185(m) >10	1	2	<1
Copper	ppm ASTM D5185(m) >75	5	5	11
Tin	ppm ASTM D5185(m) >10	0	0	0
Antimony	ppm ASTM D5185(m)	0	0	<1
Vanadium	ppm ASTM D5185(m)	0	0	0
Beryllium	ppm ASTM D5185(m)	0	0	0
Cadmium	ppm ASTM D5185(m)	0	0	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185(m)	2	3	2
Barium	ppm ASTM D5185(m)	0	<1	0
Molybdenum	ppm ASTM D5185(m)	0	<1	<1
Manganese	ppm ASTM D5185(m)	<1	0	<1
Magnesium	ppm ASTM D5185(m)	17	16	10
Calcium	ppm ASTM D5185(m) 2980	3252	3266	3051
Phosphorus	ppm ASTM D5185(m) 1100	941	922	1067
Zinc	ppm ASTM D5185(m) 1270	1136	1123	1209
Sulfur	ppm ASTM D5185(m)	3566	3592	3605
Lithium	ppm ASTM D5185(m)	<1	<1	<1

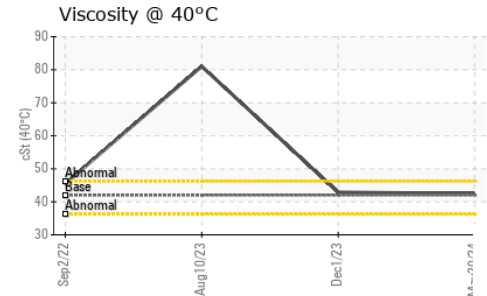
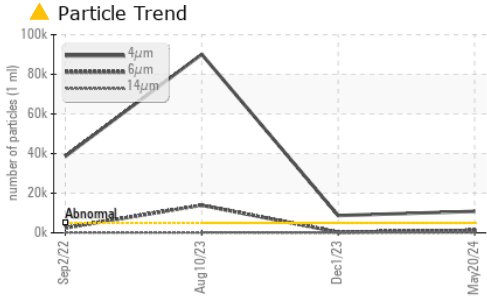
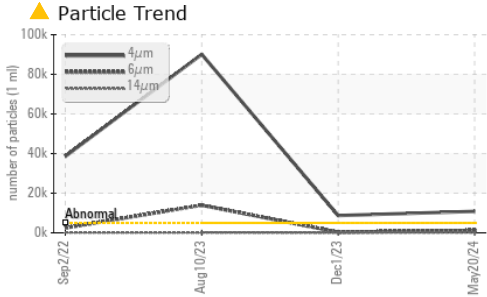
CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >20	14	15	6
Sodium	ppm ASTM D5185(m)	4	3	1
Potassium	ppm ASTM D5185(m) >20	6	<1	2

FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	▲ 10833	● 8711	▲ 90095
Particles >6µm	ASTM D7647 >1300	1233	334	▲ 13960
Particles >14µm	ASTM D7647 >160	126	31	132
Particles >21µm	ASTM D7647 >40	39	6	28
Particles >38µm	ASTM D7647 >10	4	1	2
Particles >71µm	ASTM D7647 >3	1	0	1
Oil Cleanliness	ISO 4406 (c) >19/17/14	▲ 21/17/14	● 20/16/12	▲ 24/21/14

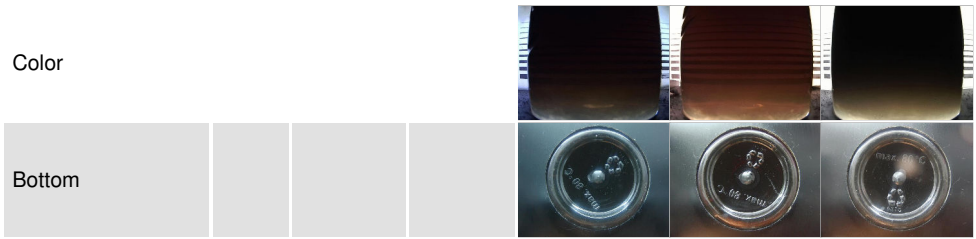
OIL ANALYSIS REPORT



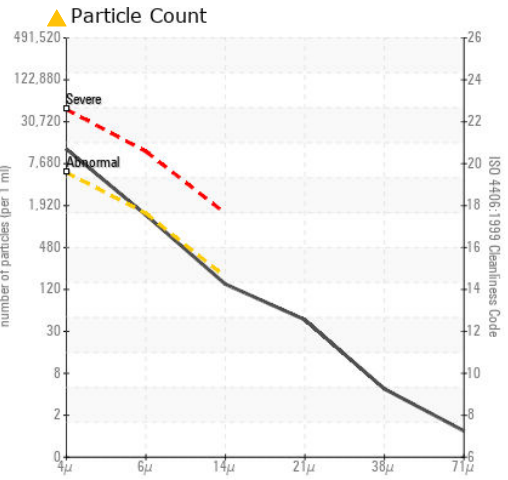
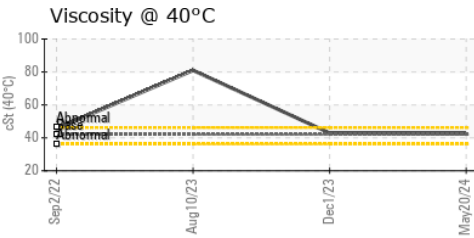
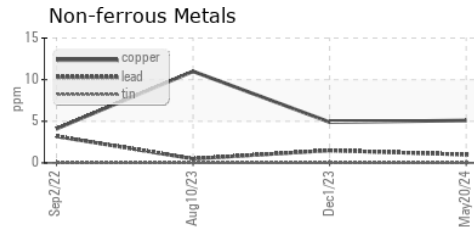
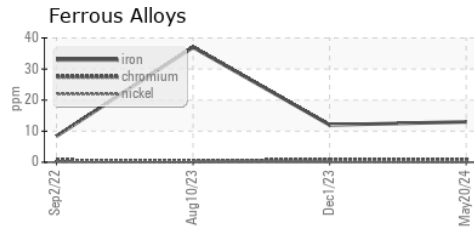
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	42.0	42.5	42.9 ▲ 81.0

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. : GFL0100561
Lab Number : 02636959
Unique Number : 5786121
Test Package : MOB 1 (Additional Tests: PrtCount)
Received : 22 May 2024
Tested : 23 May 2024
Diagnosed : 23 May 2024 - Wes Davis

GFL Environmental - 575 - Squamish Hauling
 38950 Queens Way,
 Squamish, BC
 CA V8B 0K8
 Contact: Dean Imbeau
 dimbeau@gflenv.com
 T: (604)892-5604
 F: (604)892-5238

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.