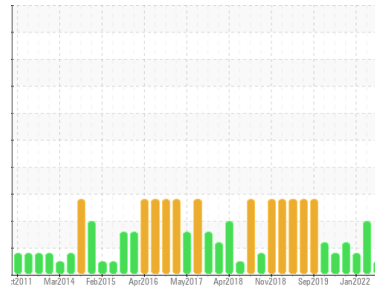




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
4407
 Component
Diesel Engine
 Fluid
{not provided} (32 LTR)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

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

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0094205	GFL0077213	GFL0040034
Sample Date	Client Info	14 Sep 2023	10 Apr 2023	05 Jan 2022
Machine Age	hrs	Client Info	44985	44985
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	Changed	Changed	N/A
Sample Status		NORMAL	ATTENTION	ABNORMAL

CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >3.0	<1.0	▲ 3.9	▲ 4
Water	WC Method >0.2	NEG	NEG	NEG
Glycol	WC Method	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m) >120	5	5	13
Chromium	ppm ASTM D5185(m) >20	<1	0	<1
Nickel	ppm ASTM D5185(m) >5	0	<1	<1
Titanium	ppm ASTM D5185(m) >2	0	<1	0
Silver	ppm ASTM D5185(m) >2	0	0	0
Aluminum	ppm ASTM D5185(m) >20	<1	1	1
Lead	ppm ASTM D5185(m) >40	<1	<1	<1
Copper	ppm ASTM D5185(m) >330	2	<1	2
Tin	ppm ASTM D5185(m) >15	0	<1	<1
Antimony	ppm ASTM D5185(m)	0	<1	0
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)	8	▲ 13	6
Barium	ppm ASTM D5185(m)	0	0	0
Molybdenum	ppm ASTM D5185(m)	57	56	56
Manganese	ppm ASTM D5185(m)	<1	<1	<1
Magnesium	ppm ASTM D5185(m)	920	▲ 883	948
Calcium	ppm ASTM D5185(m)	997	▲ 1113	965
Phosphorus	ppm ASTM D5185(m)	1029	1048	1000
Zinc	ppm ASTM D5185(m)	1139	1110	1120
Sulfur	ppm ASTM D5185(m)	2566	2677	2468
Lithium	ppm ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

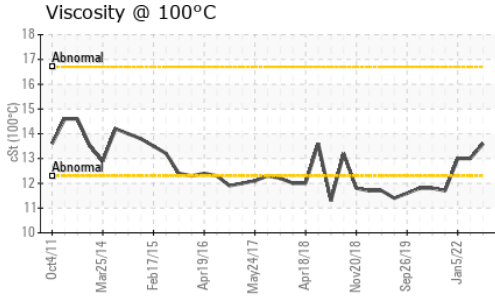
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >25	2	3	2
Sodium	ppm ASTM D5185(m)	1	1	1
Potassium	ppm ASTM D5185(m) >20	1	<1	<1

INFRA-RED

method	limit/base	current	history1	history2
Soot %	% ASTM D7844* >4	0.4	0.3	1
Nitration	Abs/cm ASTM D7624* >20	4.7	5.7	6.4
Sulfation	Abs./1mm ASTM D7415* >30	17.7	21.0	20.1



OIL ANALYSIS REPORT

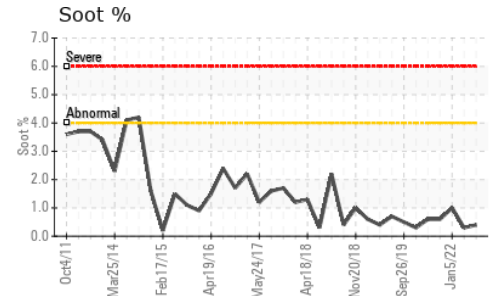
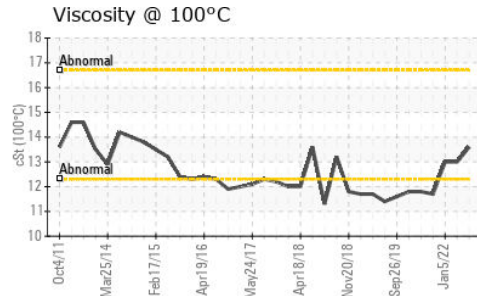
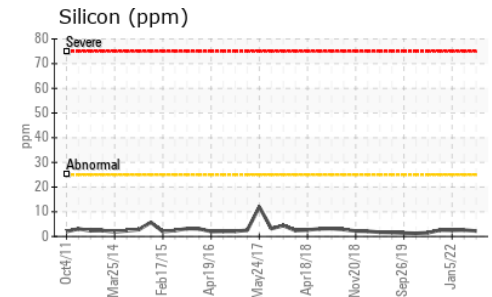
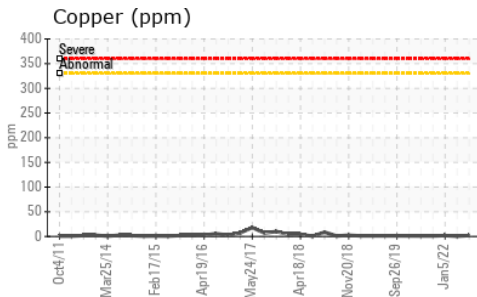
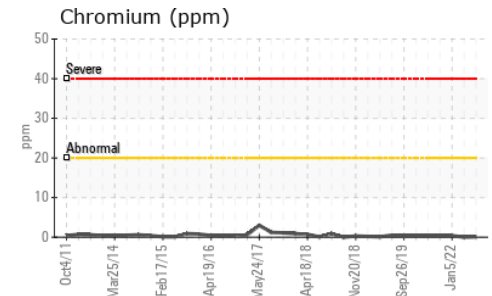
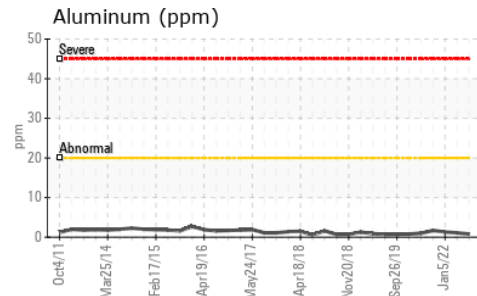
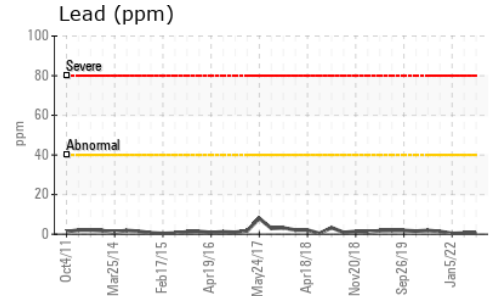
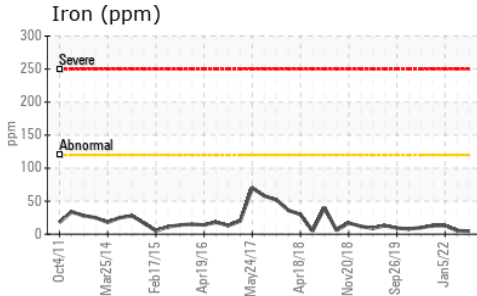


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	12.1	13.2	13.4

VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)		13.6	13.0	13.0

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 9998 - Moved No Longer Used Units
Sample No. : GFL0094205 **Received** : 18 Sep 2023 **CANADIAN UNITS**
Lab Number : **02583104** **Diagnosed** : 18 Sep 2023
Unique Number : 5644169 **Diagnostician** : Wes Davis **CA**
Test Package : MOB 1 **Contact: Service Manager**

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.