



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
WL0104
Component
Diesel Engine
Fluid
CASTROL 10W30 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0100851	GFL0085829	GFL0072307
Sample Date		Client Info		08 Feb 2024	30 Jun 2023	12 May 2023
Machine Age	hrs	Client Info		0	12176	11800
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	6	9	9
Chromium	ppm	ASTM D5185(m)	>20	0	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	<1	0	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	0	0
Aluminum	ppm	ASTM D5185(m)	>25	1	<1	<1
Lead	ppm	ASTM D5185(m)	>40	0	0	0
Copper	ppm	ASTM D5185(m)	>330	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>15	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

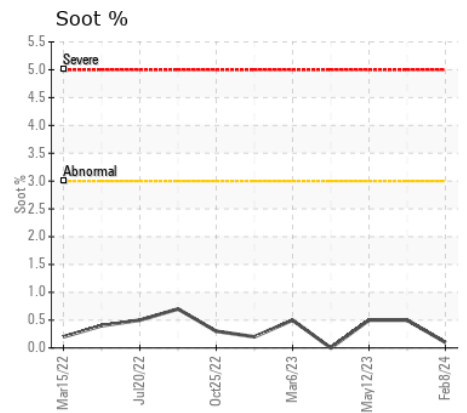
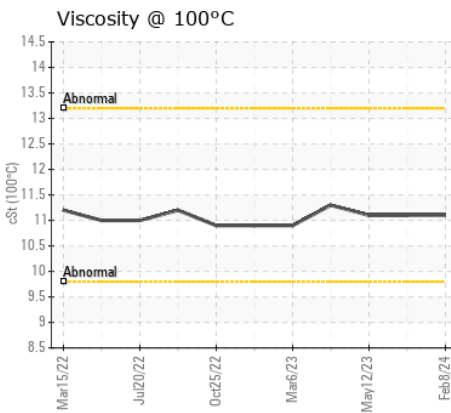
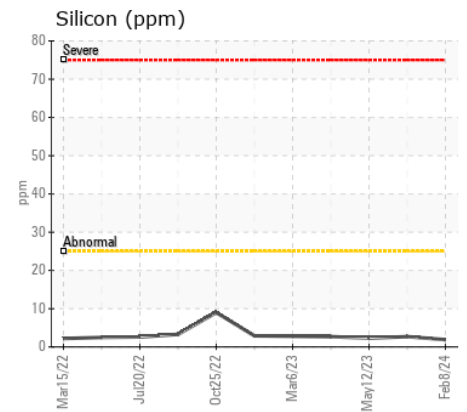
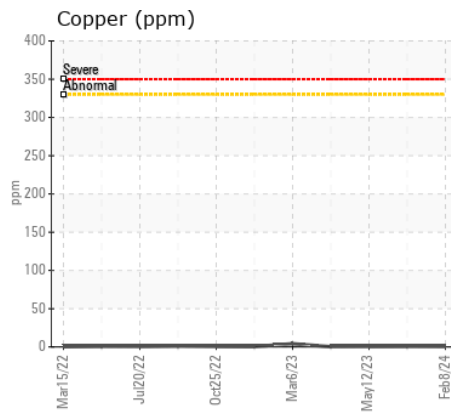
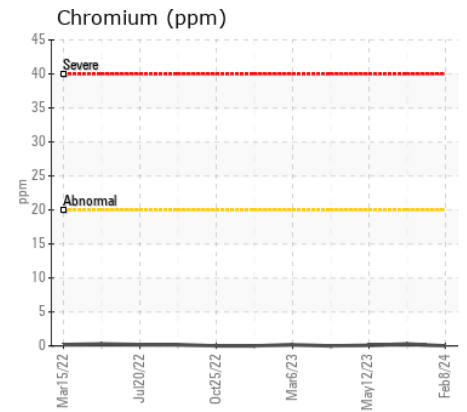
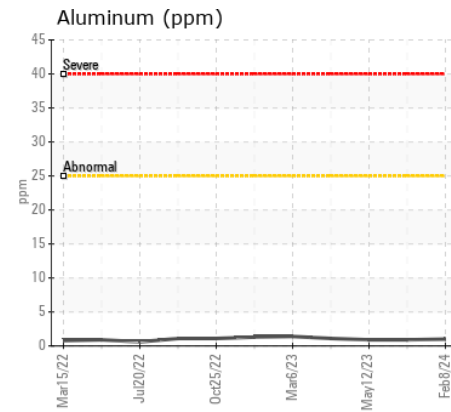
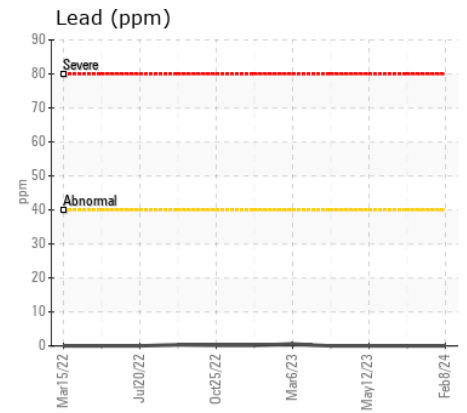
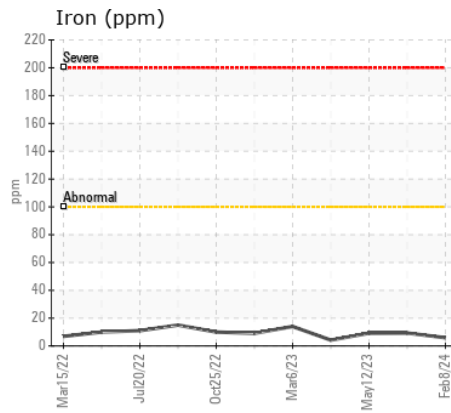
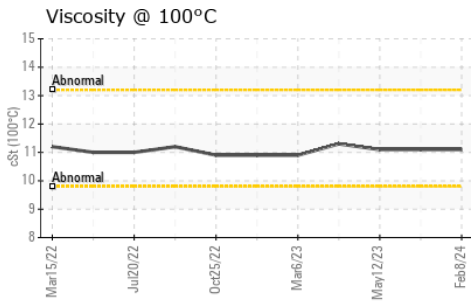
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	2	3	2
Potassium	ppm	ASTM D5185(m)	>20	1	<1	<1
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.1	0.5	0.5
Nitration	Abs/cm	ASTM D7624*	>20	5.9	5.7	6.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	18.0	18.3	18.2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		6	7	7
Boron	ppm	ASTM D5185(m)		1	5	5
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		59	58	59
Manganese	ppm	ASTM D5185(m)		0	<1	<1
Magnesium	ppm	ASTM D5185(m)		968	951	946
Calcium	ppm	ASTM D5185(m)		1036	1055	1120
Phosphorus	ppm	ASTM D5185(m)		1040	1038	1090
Zinc	ppm	ASTM D5185(m)		1193	1148	1165
Sulfur	ppm	ASTM D5185(m)		2834	2560	2711
Oxidation	Abs/.1mm	ASTM D7414*	>25	13.8	13.4	13.4
Visc @ 100°C	cSt	ASTM D7279(m)		11.1	11.1	11.1



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0100851
Lab Number : 02619877
Unique Number : 5736987
Test Package : MOB 1
Received : 05 Mar 2024
Tested : 05 Mar 2024
Diagnosed : 05 Mar 2024 - Wes Davis

GFL Environmental - 520 - Winterburn
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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.