



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
501139
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		GFL0100850	GFL0085795	GFL0085821
Sample Date		Client Info		02 Feb 2024	03 Oct 2023	25 Jul 2023
Machine Age	hrs	Client Info		713208	13089	12618
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)	>120	12	12	12
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	<1	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	<1	<1
Aluminum	ppm	ASTM D5185(m)	>20	4	3	2
Lead	ppm	ASTM D5185(m)	>40	<1	1	<1
Copper	ppm	ASTM D5185(m)	>330	3	3	3
Tin	ppm	ASTM D5185(m)	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

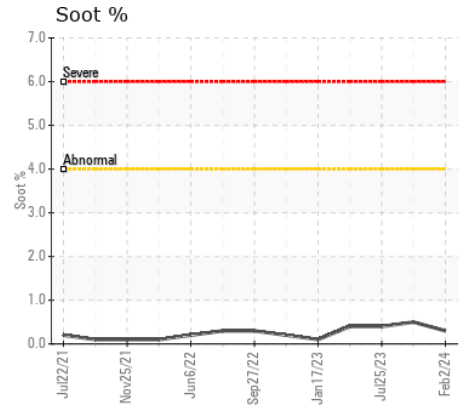
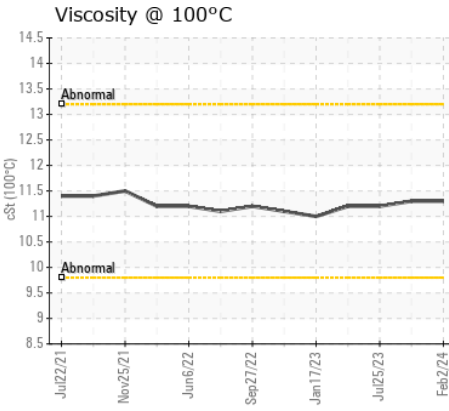
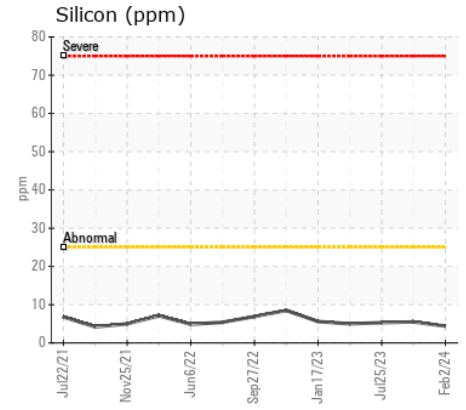
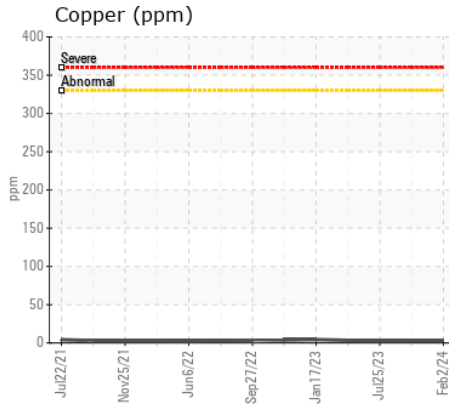
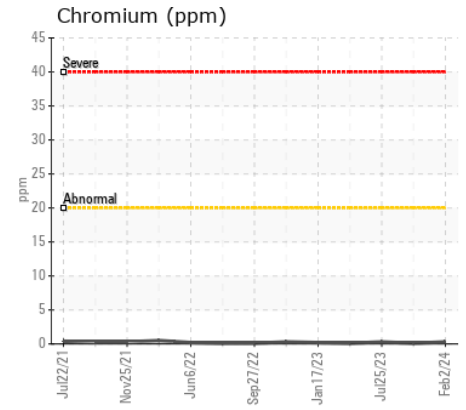
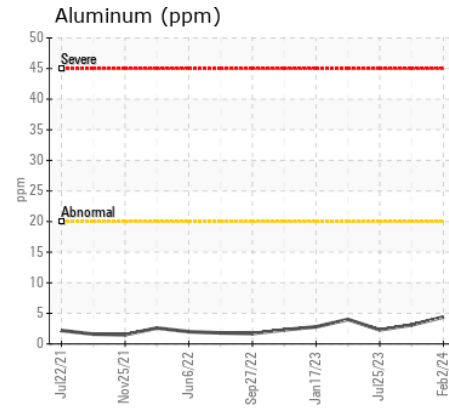
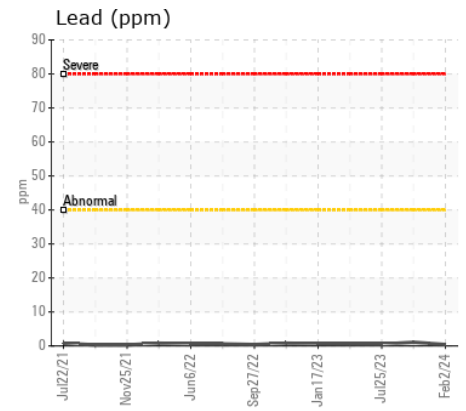
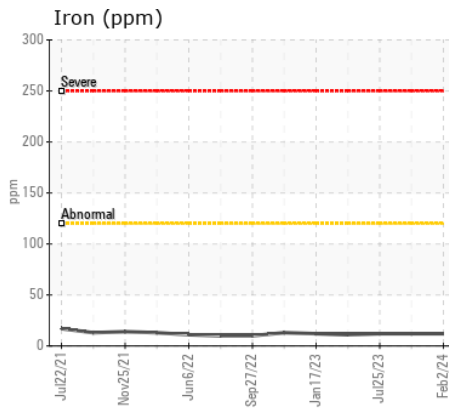
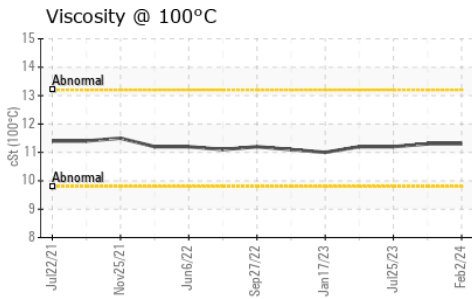
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	4	6	5
Potassium	ppm	ASTM D5185(m)	>20	2	2	1
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>4	0.3	0.5	0.4
Nitration	Abs/cm	ASTM D7624*	>20	7.7	8.1	8.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.5	20.5	21.2
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)		3	5	4
Boron	ppm	ASTM D5185(m)		1	2	3
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		60	62	61
Manganese	ppm	ASTM D5185(m)		0	0	<1
Magnesium	ppm	ASTM D5185(m)		983	1024	1000
Calcium	ppm	ASTM D5185(m)		1079	1123	1088
Phosphorus	ppm	ASTM D5185(m)		1006	1019	1055
Zinc	ppm	ASTM D5185(m)		1182	1250	1191
Sulfur	ppm	ASTM D5185(m)		2606	2472	2485
Oxidation	Abs/.1mm	ASTM D7414*	>25	15.6	16.0	15.9
Visc @ 100°C	cSt	ASTM D7279(m)		11.3	11.3	11.2



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0100850
Lab Number : 02619876
Unique Number : 5736986
Test Package : MOB 1
Received : 05 Mar 2024
Tested : 05 Mar 2024
Diagnosed : 05 Mar 2024 - Wes Davis

GFL Environmental - 520 - Winterburn
 20204 - 113 Avenue,
 Edmonton, AB
 CA T5S 0G3
 Contact: Jaekyung Ko
 jko@gflenv.com
 T: (780)444-8805
 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.