



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
GFL218
Machine Id
833049
Component
Natural Gas Engine
Fluid
NOT GIVEN (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0113178	GFL0104521	GFL0097015
Sample Date		Client Info		21 Feb 2024	05 Feb 2024	17 Oct 2023
Machine Age	kms	Client Info		9887	9214	5964
Oil Age	kms	Client Info		0	0	0
Filter Age	kms	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

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>50	6	17	41
Chromium	ppm	ASTM D5185(m)	>4	0	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	0	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>9	2	2	4
Lead	ppm	ASTM D5185(m)	>30	0	<1	2
Copper	ppm	ASTM D5185(m)	>35	<1	3	19
Tin	ppm	ASTM D5185(m)	>4	0	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

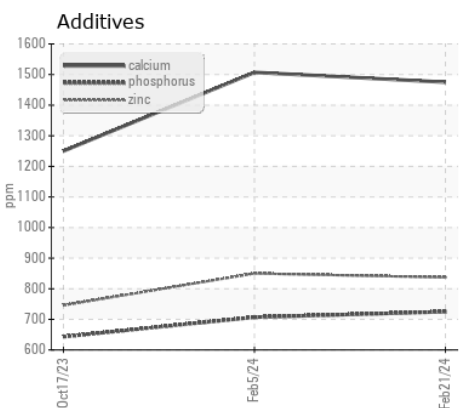
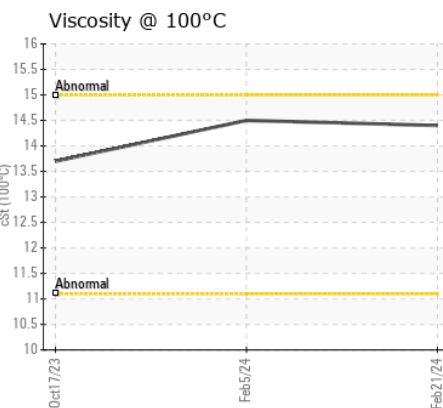
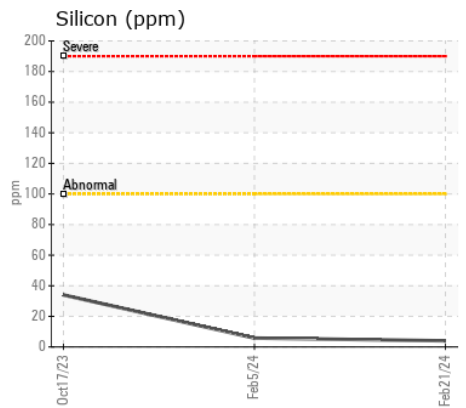
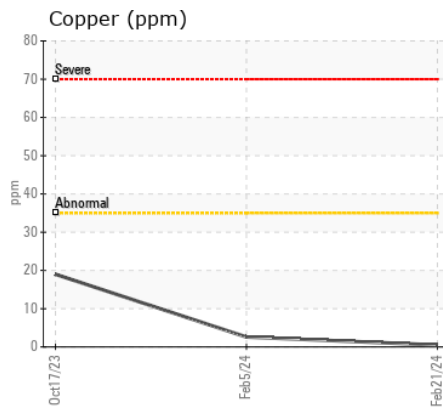
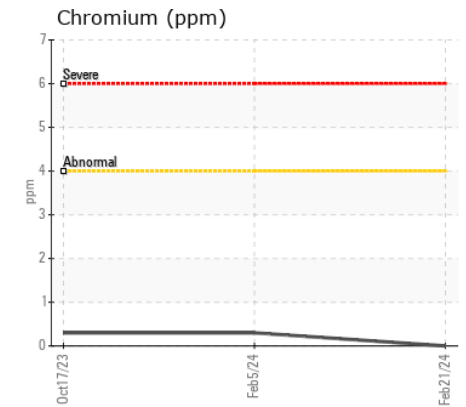
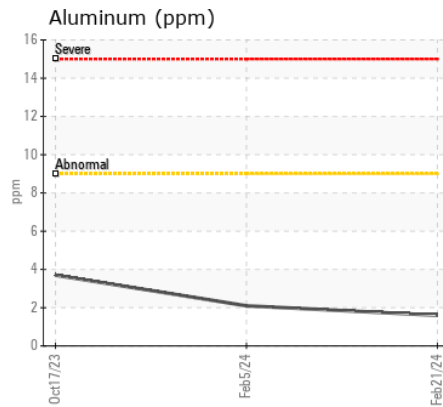
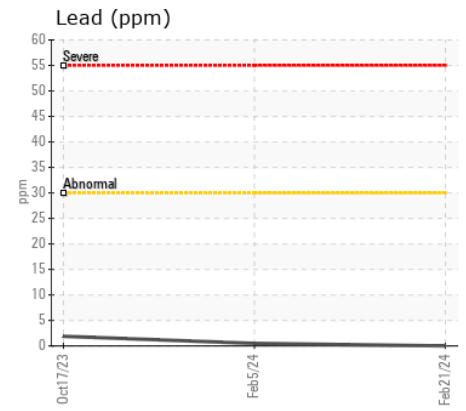
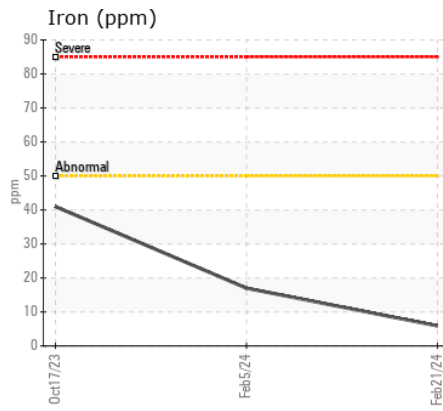
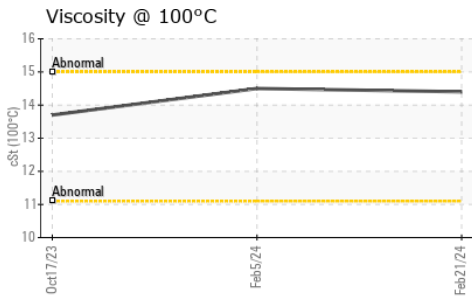
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>+100	4	6	34
Potassium	ppm	ASTM D5185(m)	>20	<1	2	6
Water		WC Method	>0.1	NEG	NEG	NEG
Soot %	%	ASTM D7844*		0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	7.3	10.0	9.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.3	20.3	21.6
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		5	6	3
Boron	ppm	ASTM D5185(m)		33	15	13
Barium	ppm	ASTM D5185(m)		0	0	3
Molybdenum	ppm	ASTM D5185(m)		47	52	94
Manganese	ppm	ASTM D5185(m)		0	1	11
Magnesium	ppm	ASTM D5185(m)		550	540	644
Calcium	ppm	ASTM D5185(m)		1475	1507	1250
Phosphorus	ppm	ASTM D5185(m)		725	707	643
Zinc	ppm	ASTM D5185(m)		837	850	746
Sulfur	ppm	ASTM D5185(m)		2110	2052	2128
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.1	16.8	16.7
Visc @ 100°C	cSt	ASTM D7279(m)		14.4	14.5	13.7



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0113178
Lab Number : 02618566
Unique Number : 5735676
Test Package : MOB 1
Received : 28 Feb 2024
Tested : 28 Feb 2024
Diagnosed : 28 Feb 2024 - Wes Davis

GFL Environmental - 225 - COT(D2)
 20 Brydon Drive
 Etobicoke, ON
 CA M9W 5R6
 Contact: Rick Philip
 rphilip@gflenv.com
 T: (416)745-8080
 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.