



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
931048
Component
Natural Gas Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0112705	GFL0102928	GFL0079536
Sample Date		Client Info		07 May 2024	23 Nov 2023	01 May 2023
Machine Age	kms	Client Info		52211	3396	30809
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	31	30	32
Chromium	ppm	ASTM D5185(m)	>5	2	3	3
Nickel	ppm	ASTM D5185(m)	>4	1	1	1
Titanium	ppm	ASTM D5185(m)	>5	0	0	2
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>25	19	22	18
Lead	ppm	ASTM D5185(m)	>40	7	9	5
Copper	ppm	ASTM D5185(m)	>150	2	2	4
Tin	ppm	ASTM D5185(m)	>4	<1	1	2
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

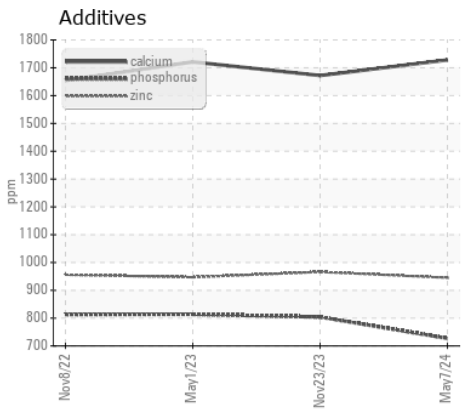
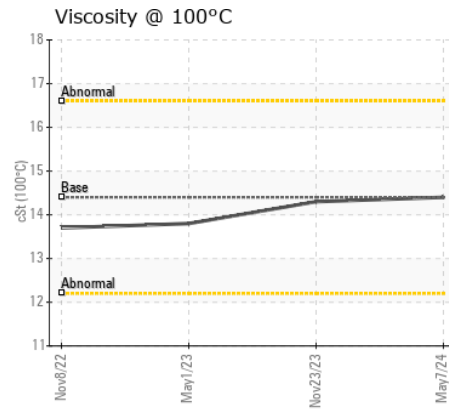
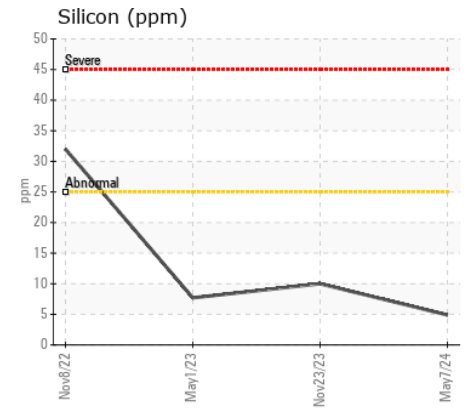
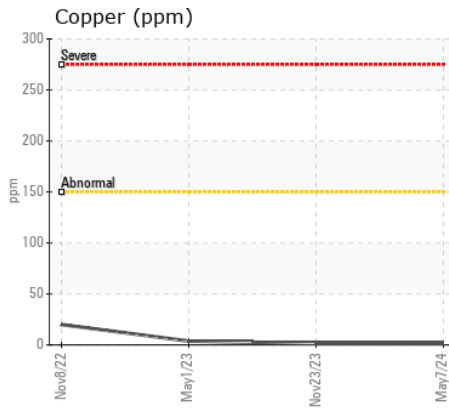
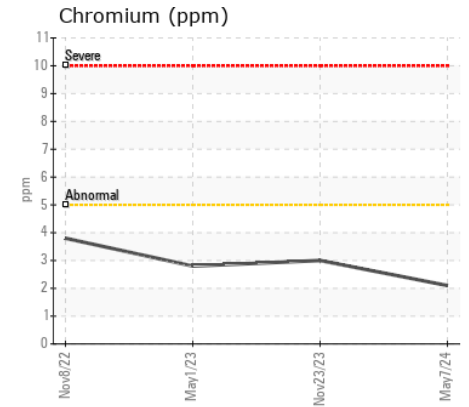
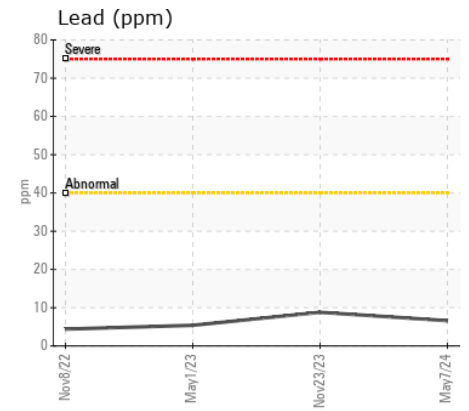
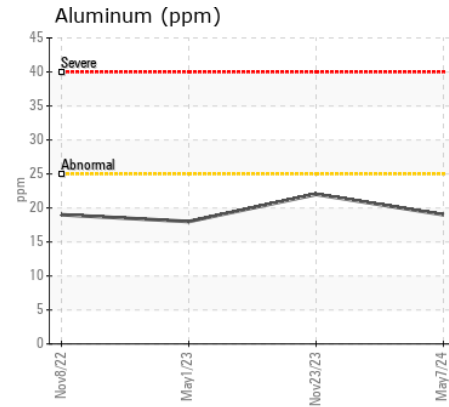
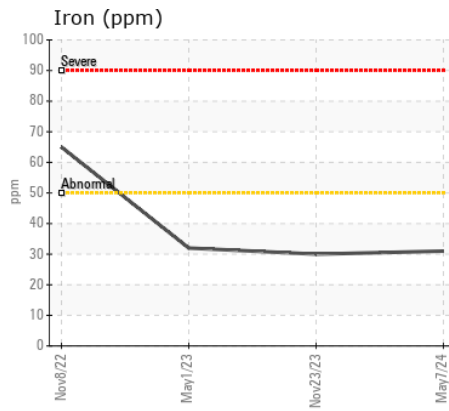
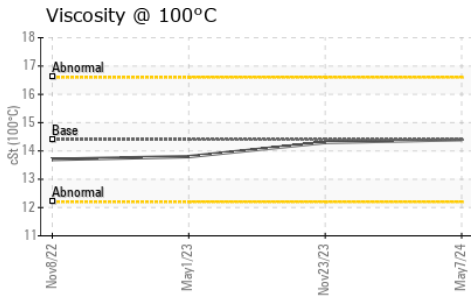
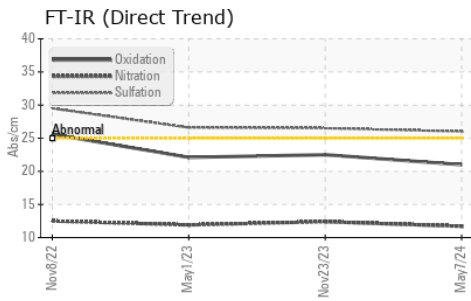
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	5	10	8
Potassium	ppm	ASTM D5185(m)	>20	6	7	5
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		---	---	---
Soot %	%	ASTM D7844*		0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	11.7	12.4	11.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	26.0	26.5	26.6
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)	>158	10	10	10
Boron	ppm	ASTM D5185(m)	250	6	8	5
Barium	ppm	ASTM D5185(m)	10	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	100	57	57	56
Manganese	ppm	ASTM D5185(m)		1	1	3
Magnesium	ppm	ASTM D5185(m)	450	594	644	609
Calcium	ppm	ASTM D5185(m)	3000	1728	1672	1721
Phosphorus	ppm	ASTM D5185(m)	1150	727	804	814
Zinc	ppm	ASTM D5185(m)	1350	945	966	947
Sulfur	ppm	ASTM D5185(m)	4250	1960	2048	2004
Oxidation	Abs/.1mm	ASTM D7414*	>25	21.0	22.5	22.1
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	14.4	14.3	13.8



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0112705
Lab Number : 02633992
Unique Number : 5775145
Test Package : MOB 1

GFL Environmental - 253 - TOR APT
 15 Bermondsey Road - Building B
 Toronto, ON
 CA M4B 1Y9
 Contact: Natalia Stalynska
 nstalynska@gflenv.com

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.

T:
F: