



Machine Id
831020
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		GFL0119238	GFL0079540	GFL0053133
Sample Date		Client Info		24 Jun 2024	01 Jun 2023	05 Jul 2022
Machine Age	hrs	Client Info		6507	4467	2389
Oil Age	hrs	Client Info		1170	0	0
Filter Age	hrs	Client Info		1170	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)	>50	14	13	15
Chromium	ppm	ASTM D5185(m)	>4	1	1	1
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	<1	<1
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>9	2	2	2
Lead	ppm	ASTM D5185(m)	>30	1	2	1
Copper	ppm	ASTM D5185(m)	>35	<1	2	3
Tin	ppm	ASTM D5185(m)	>4	<1	<1	1
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

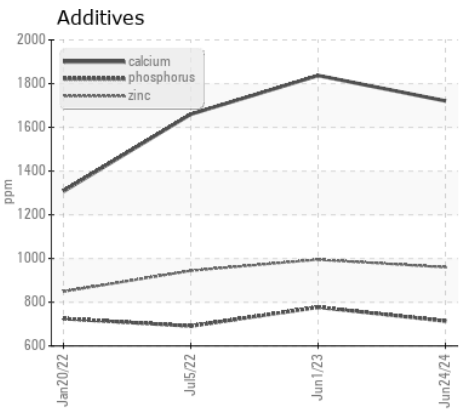
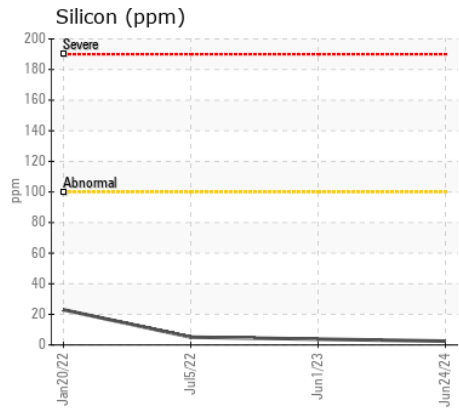
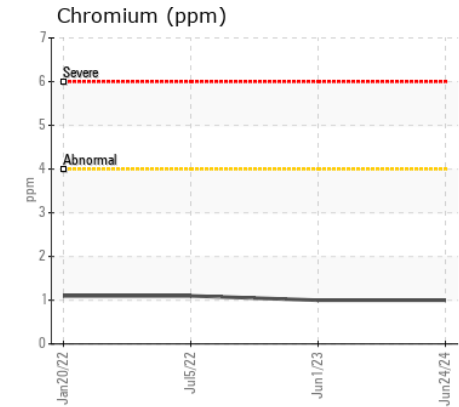
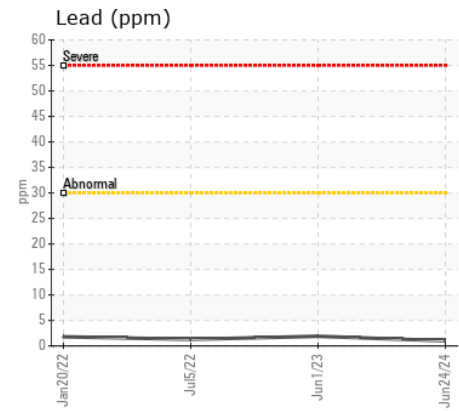
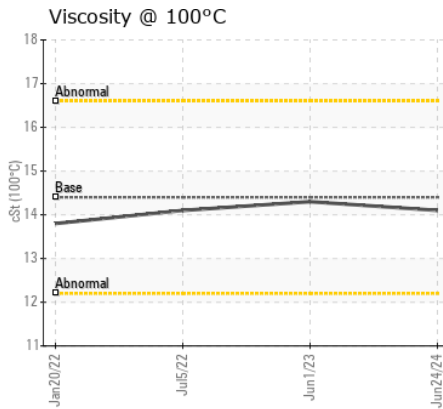
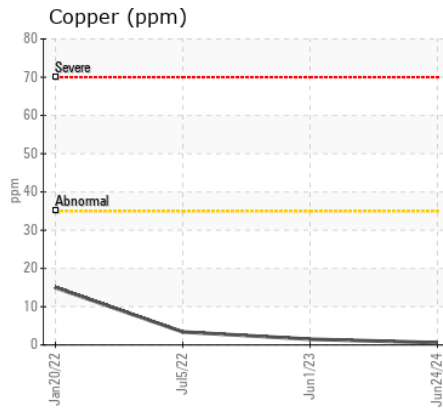
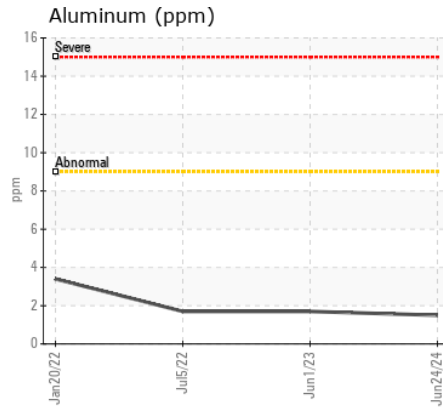
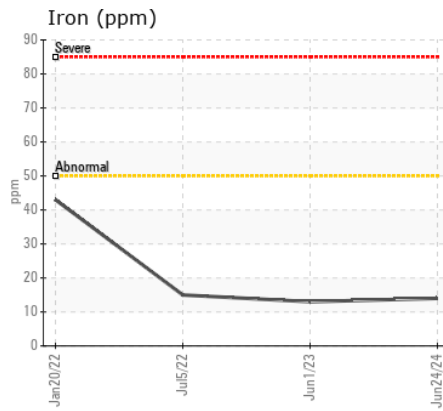
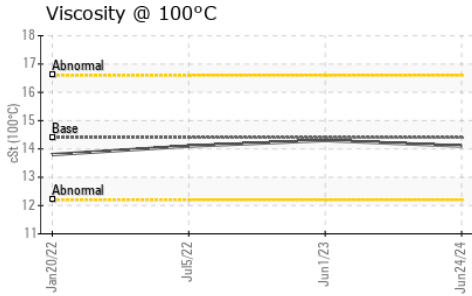
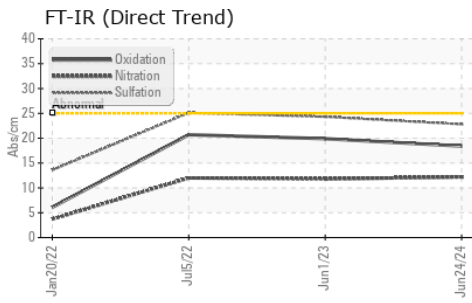
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>+100	2	4	5
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Water		WC Method	>0.1	NEG	NEG	NEG
Soot %	%	ASTM D7844*		0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	12.2	11.8	12.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	22.8	24.3	25.1
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
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	7	8	7
Boron	ppm	ASTM D5185(m)	250	14	10	9
Barium	ppm	ASTM D5185(m)	10	<1	0	0
Molybdenum	ppm	ASTM D5185(m)	100	55	57	57
Manganese	ppm	ASTM D5185(m)		<1	<1	2
Magnesium	ppm	ASTM D5185(m)	450	577	608	579
Calcium	ppm	ASTM D5185(m)	3000	1721	1837	1660
Phosphorus	ppm	ASTM D5185(m)	1150	714	777	691
Zinc	ppm	ASTM D5185(m)	1350	960	995	944
Sulfur	ppm	ASTM D5185(m)	4250	2025	2182	2110
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.4	19.9	20.7
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	14.1	14.3	14.1



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0119238
Lab Number : 02644526
Unique Number : 5802065
Test Package : MOB 1 (Additional Tests: Visual)

Received : 28 Jun 2024
Tested : 28 Jun 2024
Diagnosed : 28 Jun 2024 - Wes Davis

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: