



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
931039
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		GFL0119237	GFL0102923	GFL0066639
Sample Date		Client Info		21 Jun 2024	24 Jan 2024	19 Dec 2022
Machine Age	hrs	Client Info		4442	3595	14635
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)	>50	21	41	87
Chromium	ppm	ASTM D5185(m)	>5	2	3	5
Nickel	ppm	ASTM D5185(m)	>4	<1	2	2
Titanium	ppm	ASTM D5185(m)	>5	0	0	19
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>25	17	33	40
Lead	ppm	ASTM D5185(m)	>40	2	8	3
Copper	ppm	ASTM D5185(m)	>150	1	3	18
Tin	ppm	ASTM D5185(m)	>4	<1	1	2
Vanadium	ppm	ASTM D5185(m)		0	0	<1
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

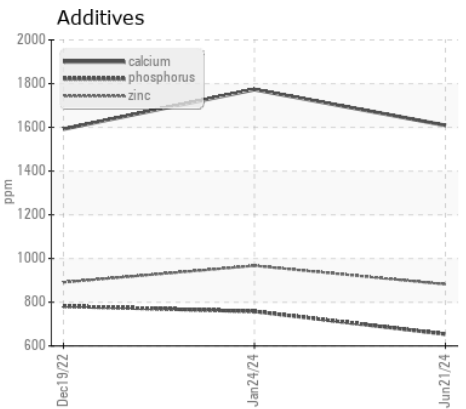
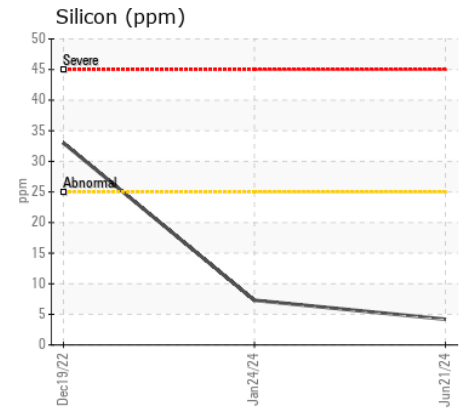
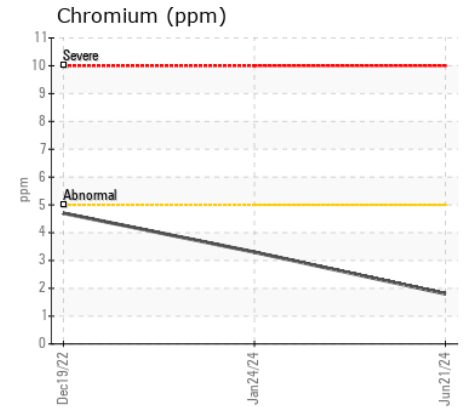
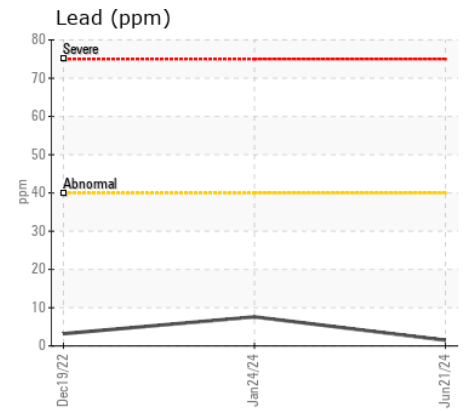
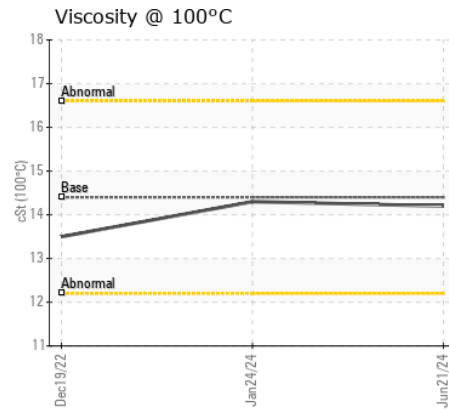
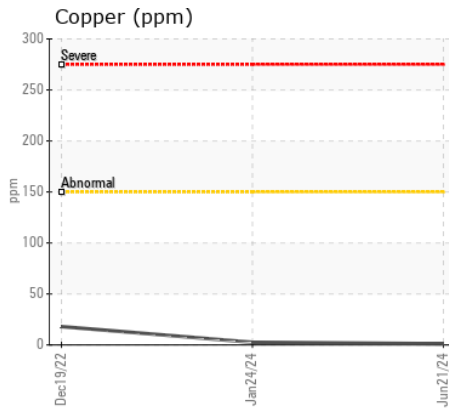
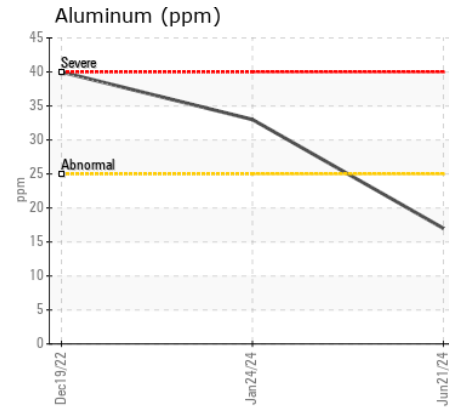
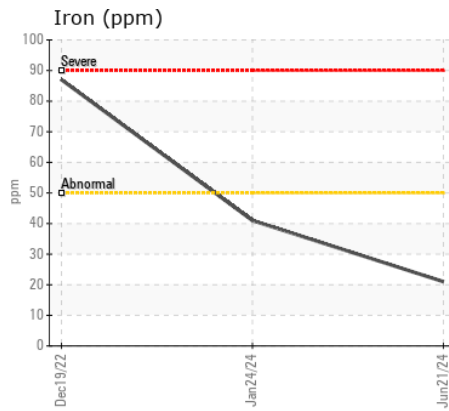
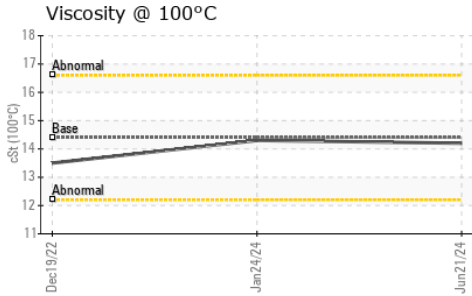
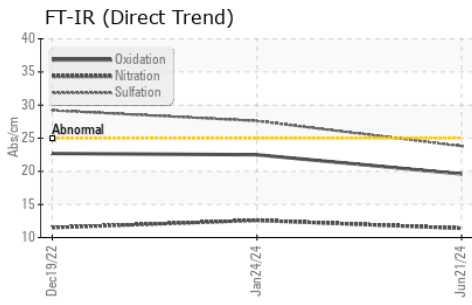
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	4	7	33
Potassium	ppm	ASTM D5185(m)	>20	22	56	111
Water		WC Method	>0.1	NEG	NEG	NEG
Soot %	%	ASTM D7844*		0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	11.4	12.6	11.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	23.8	27.6	29.2
Silt	scalar	Visual*	NONE	VLITE	---	---
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	8	10	8
Boron	ppm	ASTM D5185(m)	250	7	6	5
Barium	ppm	ASTM D5185(m)	10	<1	0	4
Molybdenum	ppm	ASTM D5185(m)	100	53	56	56
Manganese	ppm	ASTM D5185(m)		<1	1	11
Magnesium	ppm	ASTM D5185(m)	450	543	595	564
Calcium	ppm	ASTM D5185(m)	3000	1609	1773	1592
Phosphorus	ppm	ASTM D5185(m)	1150	654	758	782
Zinc	ppm	ASTM D5185(m)	1350	882	967	891
Sulfur	ppm	ASTM D5185(m)	4250	1972	2140	2044
Oxidation	Abs/.1mm	ASTM D7414*	>25	19.6	22.5	22.7
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	14.2	14.3	13.5



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0119237
Lab Number : 02643956
Unique Number : 5801495
Test Package : MOB 1 (Additional Tests: Visual)

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: