



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
931012
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		GFL0102933	GFL0094839	GFL0066651
Sample Date		Client Info		18 Mar 2024	18 Sep 2023	10 Mar 2023
Machine Age	hrs	Client Info		3582	26736	13975
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>50	20	32	84
Chromium	ppm	ASTM D5185(m)	>5	<1	1	3
Nickel	ppm	ASTM D5185(m)	>4	<1	1	2
Titanium	ppm	ASTM D5185(m)	>5	<1	1	19
Silver	ppm	ASTM D5185(m)	>3	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>25	4	5	11
Lead	ppm	ASTM D5185(m)	>40	6	3	4
Copper	ppm	ASTM D5185(m)	>150	3	4	19
Tin	ppm	ASTM D5185(m)	>4	1	1	2
Vanadium	ppm	ASTM D5185(m)		0	0	<1

CONTAMINATION

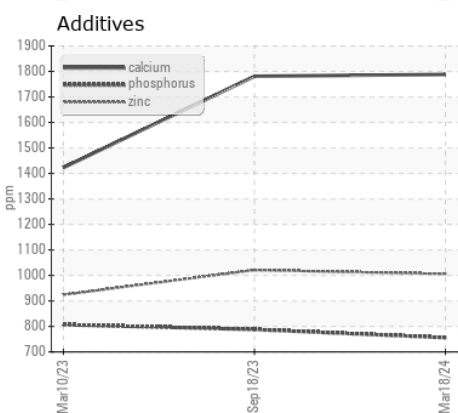
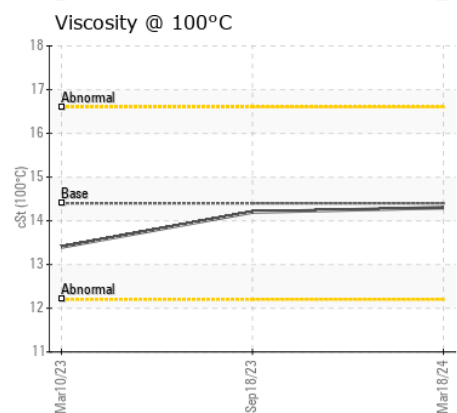
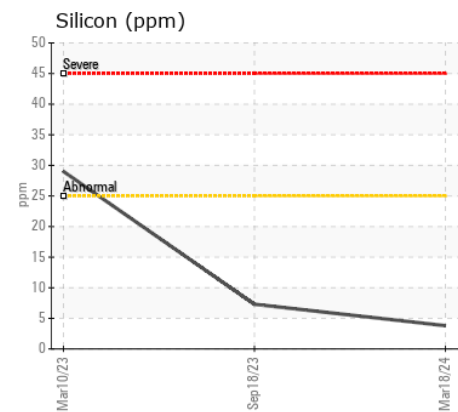
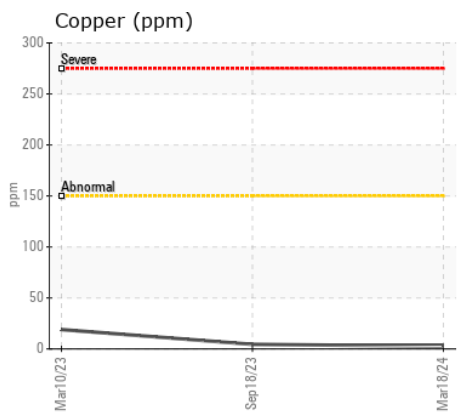
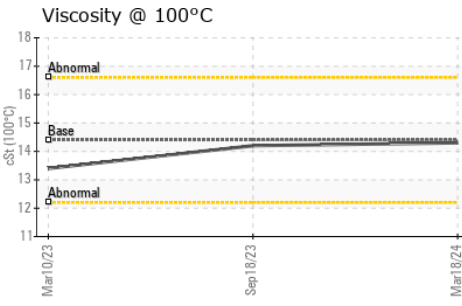
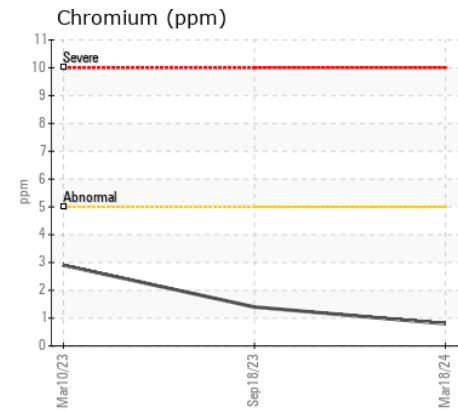
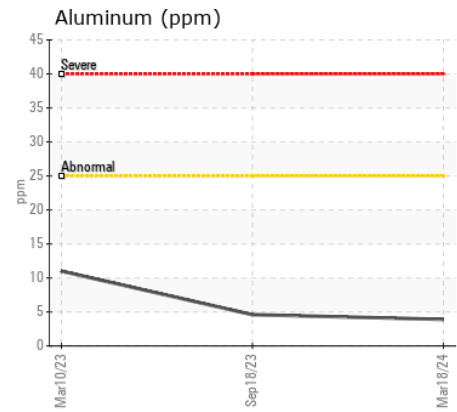
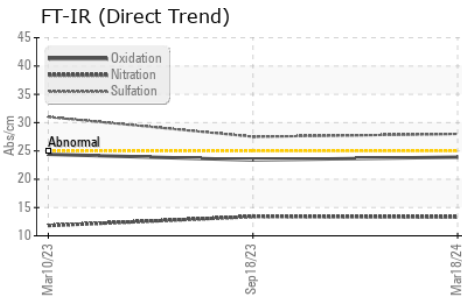
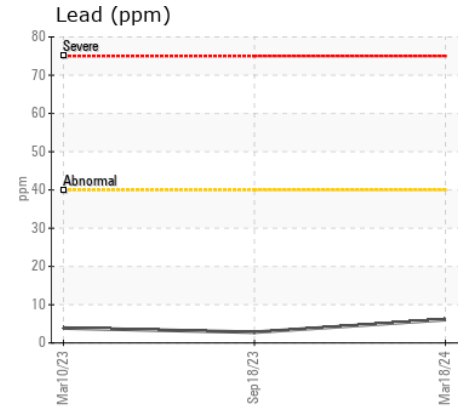
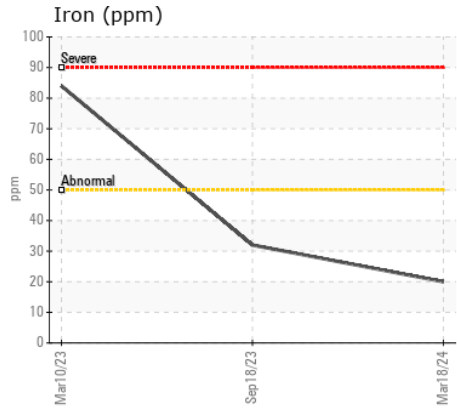
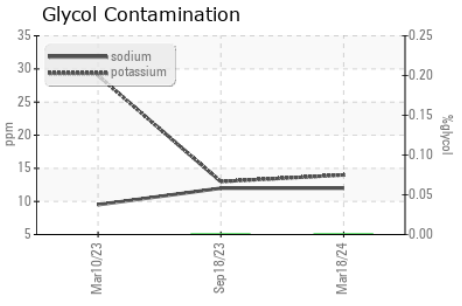
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	4	7	29
Potassium	ppm	ASTM D5185(m)	>20	14	13	29
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol	%	ASTM D7922*		0.0	0.0	---
Soot %	%	ASTM D7844*		0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	13.3	13.4	11.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	28.0	27.5	31.0
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	12	12	10
Boron	ppm	ASTM D5185(m)	250	6	5	6
Barium	ppm	ASTM D5185(m)	10	<1	<1	3
Molybdenum	ppm	ASTM D5185(m)	100	60	62	57
Manganese	ppm	ASTM D5185(m)		1	2	11
Magnesium	ppm	ASTM D5185(m)	450	619	668	565
Calcium	ppm	ASTM D5185(m)	3000	1788	1781	1423
Phosphorus	ppm	ASTM D5185(m)	1150	756	788	807
Zinc	ppm	ASTM D5185(m)	1350	1006	1021	924
Sulfur	ppm	ASTM D5185(m)	4250	2012	2031	1990
Oxidation	Abs/.1mm	ASTM D7414*	>25	23.9	23.4	24.4
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	14.3	14.2	13.4



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0102933 **Received** : 10 Apr 2024
Lab Number : 02627817 **Tested** : 10 Apr 2024
Unique Number : 5760949 **Diagnosed** : 10 Apr 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: Glycol)

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.