



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		GFL0102928	GFL0079536	GFL0060169
Sample Date		Client Info		23 Nov 2023	01 May 2023	08 Nov 2022
Machine Age	hrs	Client Info		3396	30809	18658
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	30	32	65
Chromium	ppm	ASTM D5185(m)	>5	3	3	4
Nickel	ppm	ASTM D5185(m)	>4	1	1	2
Titanium	ppm	ASTM D5185(m)	>5	0	2	19
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>25	22	18	19
Lead	ppm	ASTM D5185(m)	>40	9	5	4
Copper	ppm	ASTM D5185(m)	>150	2	4	20
Tin	ppm	ASTM D5185(m)	>4	1	2	3
Vanadium	ppm	ASTM D5185(m)		0	0	<1
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	VLITE	---	---

CONTAMINATION

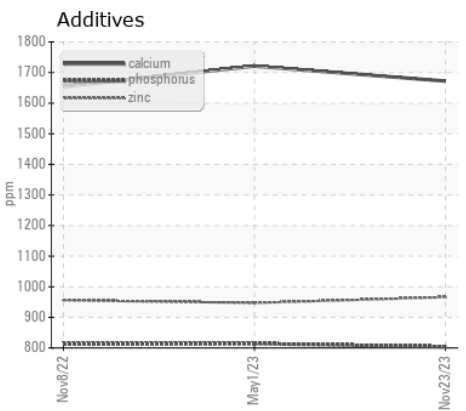
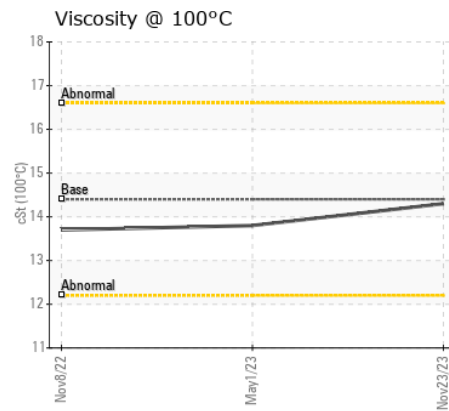
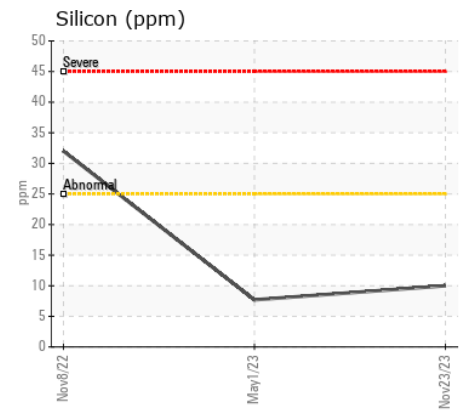
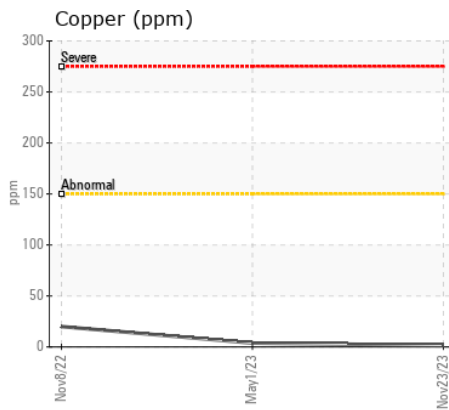
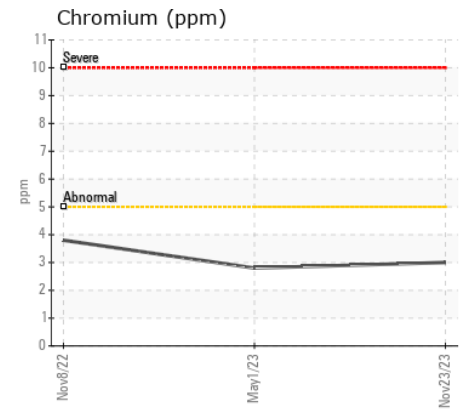
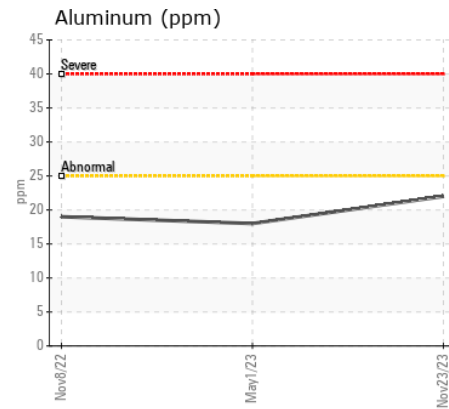
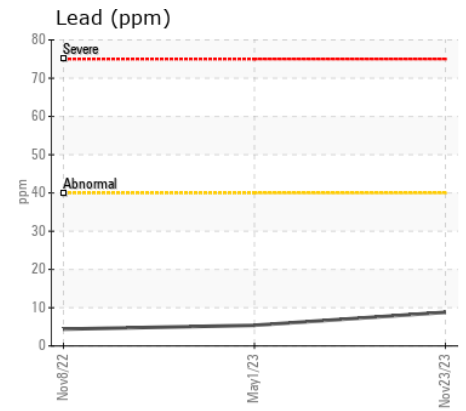
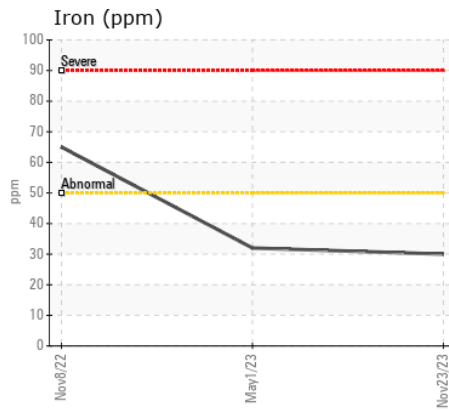
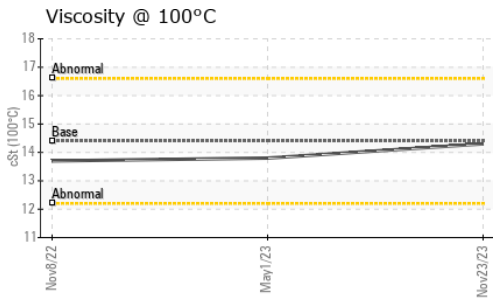
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	10	8	32
Potassium	ppm	ASTM D5185(m)	>20	7	5	11
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		---	---	0.0
Soot %	%	ASTM D7844*		0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	12.4	11.9	12.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	26.5	26.6	29.5
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	10	10	9
Boron	ppm	ASTM D5185(m)	250	8	5	6
Barium	ppm	ASTM D5185(m)	10	0	<1	4
Molybdenum	ppm	ASTM D5185(m)	100	57	56	57
Manganese	ppm	ASTM D5185(m)		1	3	12
Magnesium	ppm	ASTM D5185(m)	450	644	609	591
Calcium	ppm	ASTM D5185(m)	3000	1672	1721	1654
Phosphorus	ppm	ASTM D5185(m)	1150	804	814	813
Zinc	ppm	ASTM D5185(m)	1350	966	947	956
Sulfur	ppm	ASTM D5185(m)	4250	2048	2004	1970
Oxidation	Abs/.1mm	ASTM D7414*	>25	22.5	22.1	25.6
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	14.3	13.8	13.7



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 253 - TOR APT**
Sample No. : GFL0102928 **Received** : 09 Jan 2024 **15 Bermondsey Road - Building B**
Lab Number : 02607359 **Diagnosed** : 09 Jan 2024 **Toronto, ON**
Unique Number : 5708445 **Diagnostician** : Wes Davis **CA M4B 1Y9**
Test Package : MOB 1 (Additional Tests: Visual) **Contact: Sonia Ciampa**
sciampa@gflenv.com
T: (416)740-8279
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.