



Machine Id
231003
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		GFL0119228	GFL0102932	GFL
Sample Date		Client Info		05 Jun 2024	31 Jan 2024	07 Jun 2023
Machine Age	kms	Client Info		3092	31624	1163
Oil Age	kms	Client Info		0	0	0
Filter Age	kms	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

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>50	12	15	17
Chromium	ppm	ASTM D5185(m)	>4	2	2	0
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>9	<1	2	2
Lead	ppm	ASTM D5185(m)	>30	0	<1	<1
Copper	ppm	ASTM D5185(m)	>35	<1	2	3
Tin	ppm	ASTM D5185(m)	>4	0	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

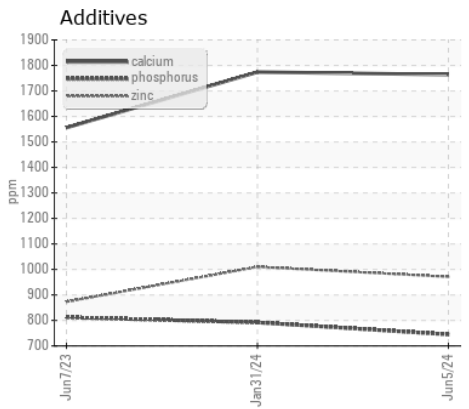
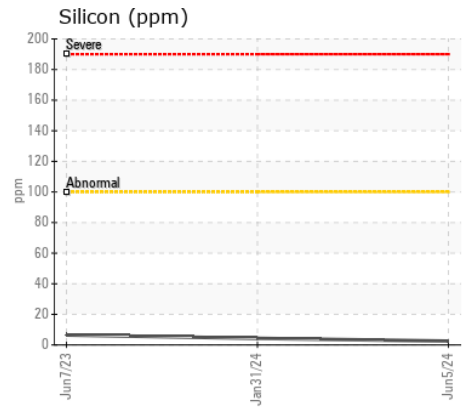
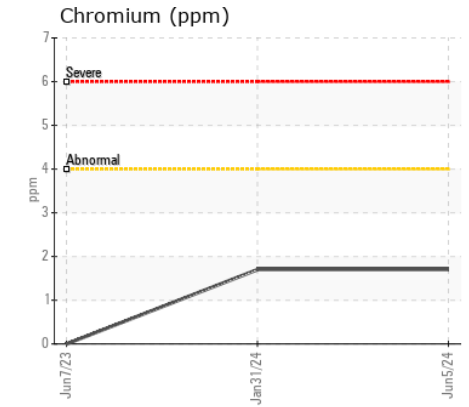
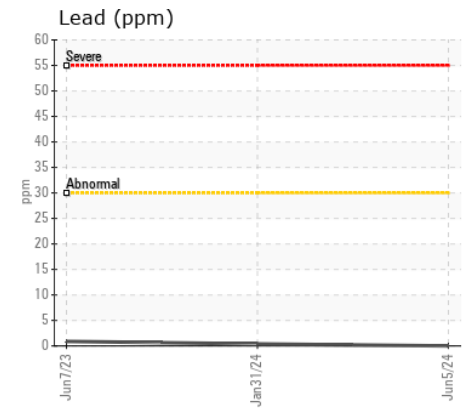
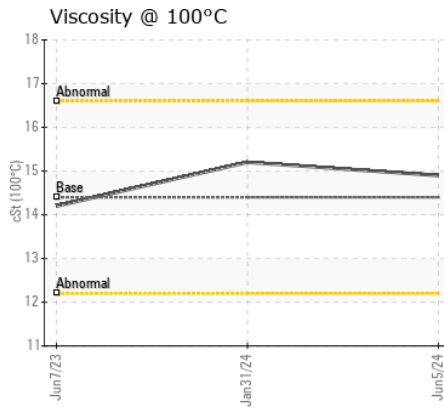
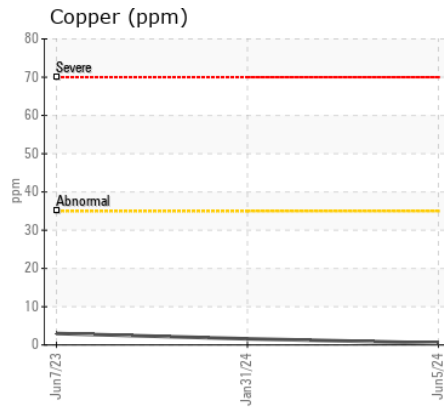
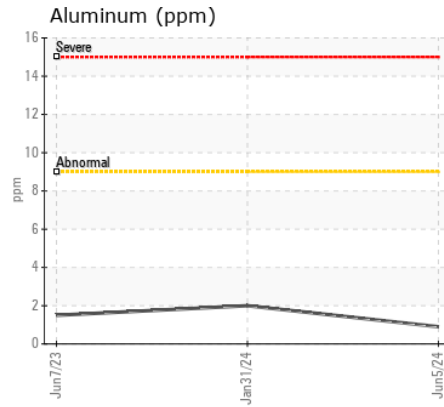
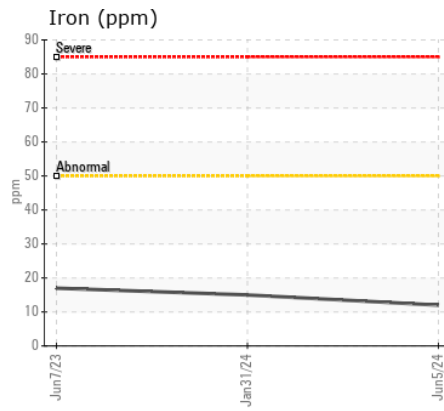
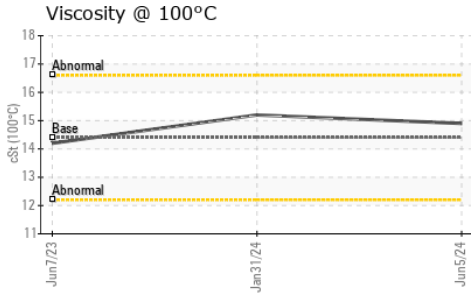
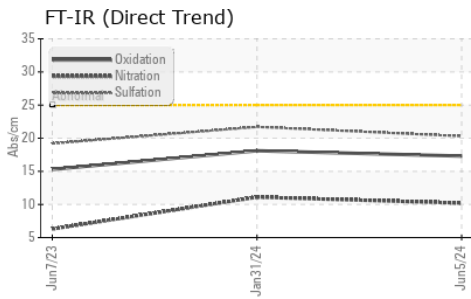
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>+100	2	4	6
Potassium	ppm	ASTM D5185(m)	>20	<1	1	0
Water		WC Method	>0.1	NEG	NEG	NEG
Soot %	%	ASTM D7844*		0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	10.2	11.1	6.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.3	21.7	19.2
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	6	6	6
Boron	ppm	ASTM D5185(m)	250	24	20	41
Barium	ppm	ASTM D5185(m)	10	0	0	0
Molybdenum	ppm	ASTM D5185(m)	100	57	57	53
Manganese	ppm	ASTM D5185(m)		<1	<1	1
Magnesium	ppm	ASTM D5185(m)	450	605	625	575
Calcium	ppm	ASTM D5185(m)	3000	1764	1774	1556
Phosphorus	ppm	ASTM D5185(m)	1150	745	792	812
Zinc	ppm	ASTM D5185(m)	1350	971	1010	873
Sulfur	ppm	ASTM D5185(m)	4250	2072	2262	2138
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.3	18.1	15.3
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	14.9	15.2	14.2



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0119228 **Received** : 07 Jun 2024
Lab Number : 02640443 **Tested** : 07 Jun 2024
Unique Number : 5789605 **Diagnosed** : 07 Jun 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: Visual)

GFL Environmental - 253 - TOR APT
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 Contact: Natalia Stalynska
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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.

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