



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
[1294108]

Machine Id
810049

Component
Diesel Engine

Fluid
DIESEL ENGINE OIL SAE 40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0120021	GFL0093968	GFL0093936
Sample Date		Client Info		13 Jun 2024	13 Mar 2024	19 Dec 2023
Machine Age	hrs	Client Info		5911	5350	4884
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	29	17	43
Chromium	ppm	ASTM D5185(m)	>20	1	<1	2
Nickel	ppm	ASTM D5185(m)	>4	<1	0	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	<1	0	0
Aluminum	ppm	ASTM D5185(m)	>20	3	2	6
Lead	ppm	ASTM D5185(m)	>40	0	0	<1
Copper	ppm	ASTM D5185(m)	>330	2	2	2
Tin	ppm	ASTM D5185(m)	>15	0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

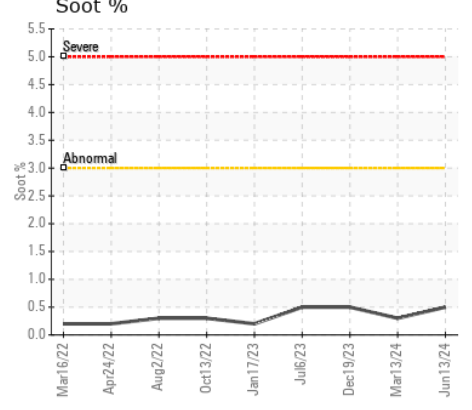
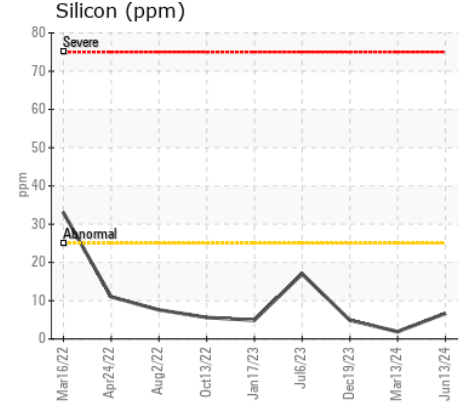
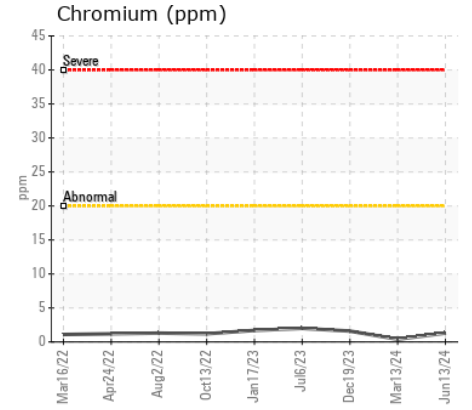
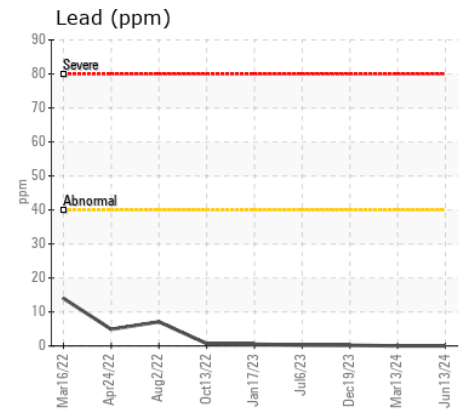
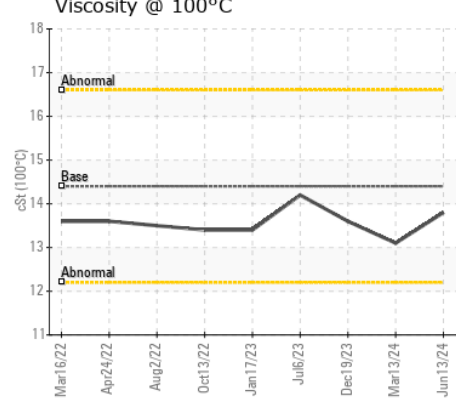
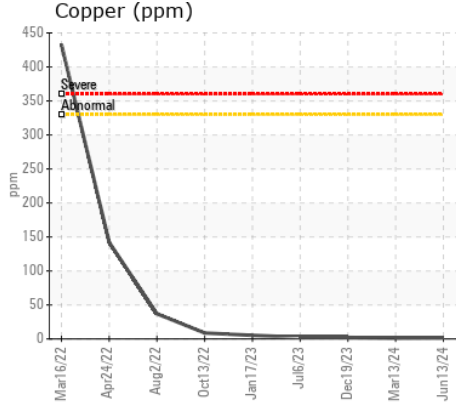
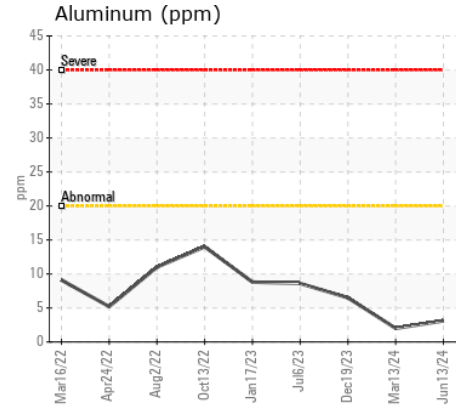
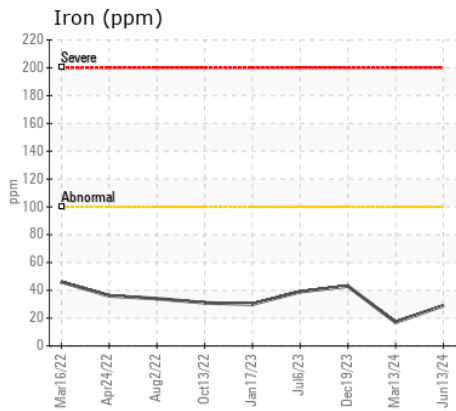
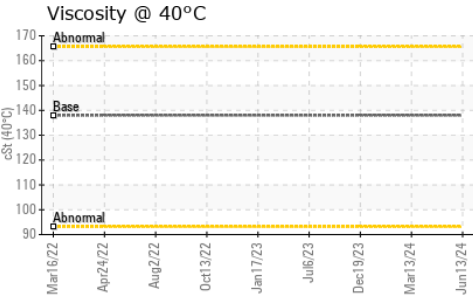
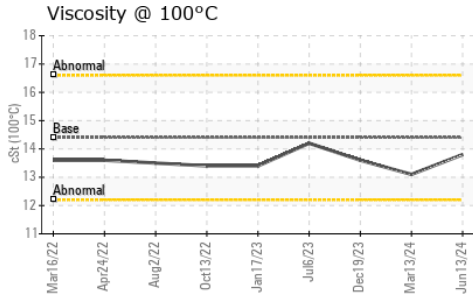
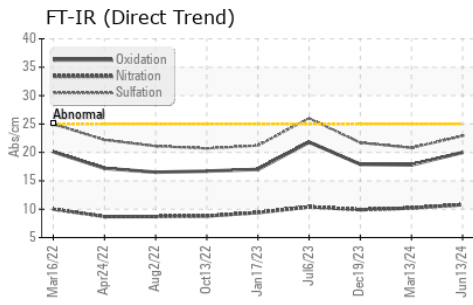
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	7	2	5
Potassium	ppm	ASTM D5185(m)	>20	4	1	10
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.5	0.3	0.5
Nitration	Abs/cm	ASTM D7624*	>20	10.8	10.2	9.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	22.9	20.8	21.7
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)	>216	7	7	8
Boron	ppm	ASTM D5185(m)	250	4	6	5
Barium	ppm	ASTM D5185(m)	10	0	0	0
Molybdenum	ppm	ASTM D5185(m)	100	61	59	61
Manganese	ppm	ASTM D5185(m)		<1	0	0
Magnesium	ppm	ASTM D5185(m)	450	976	911	948
Calcium	ppm	ASTM D5185(m)	3000	1125	1095	1212
Phosphorus	ppm	ASTM D5185(m)	1150	997	934	1037
Zinc	ppm	ASTM D5185(m)	1350	1239	1138	1210
Sulfur	ppm	ASTM D5185(m)	4250	2421	2320	2597
Oxidation	Abs/.1mm	ASTM D7414*	>25	20.0	17.8	17.9
Visc @ 40°C	cSt	ASTM D7279(m)	138	101	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	13.8	13.1	13.6
Viscosity Index (VI)	Scale	ASTM D2270*	102	137	---	---



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0120021
Lab Number : 02643349
Unique Number : 5800888
Test Package : MOB 1 (Additional Tests: KV40, VI)

Received : 21 Jun 2024
Tested : 21 Jun 2024
Diagnosed : 21 Jun 2024 - Wes Davis
GFL Environmental - 777 - Belleville-Municipal waste
 197 Putman Industrial Road
 Belleville, ON
 CA K8N 4Z6
 Contact: Ian Patton
 ipatton@gflenv.com
 T: (905)831-6297
 F: (905)426-3577

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.