

Area
[1268848]

Machine Id
810047

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		GFL0093971	GFL0093956	GFL0093946
Sample Date		Client Info		07 May 2024	31 Jan 2024	15 Nov 2023
Machine Age	hrs	Client Info		5801	5264	4804
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	27	23	27
Chromium	ppm	ASTM D5185(m)	>20	1	1	1
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	3	4	5
Lead	ppm	ASTM D5185(m)	>40	0	<1	<1
Copper	ppm	ASTM D5185(m)	>330	2	2	2
Tin	ppm	ASTM D5185(m)	>15	0	<1	0
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

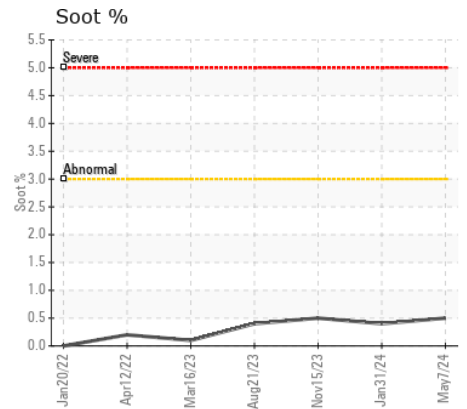
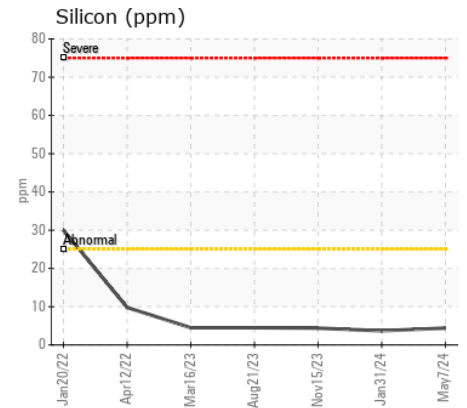
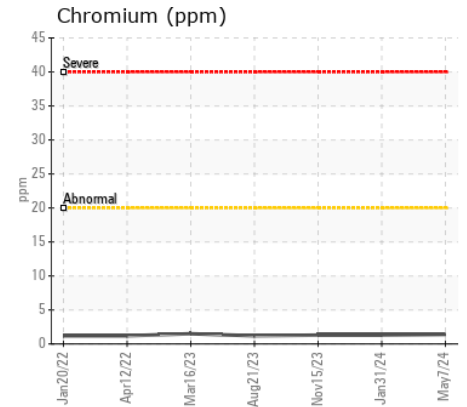
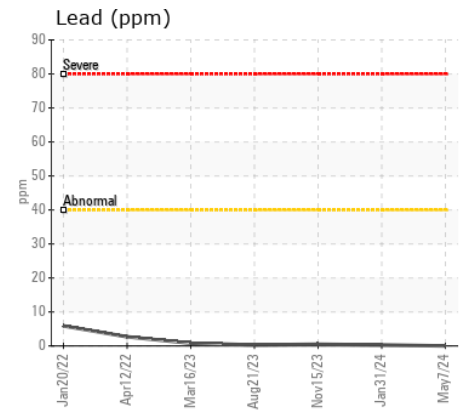
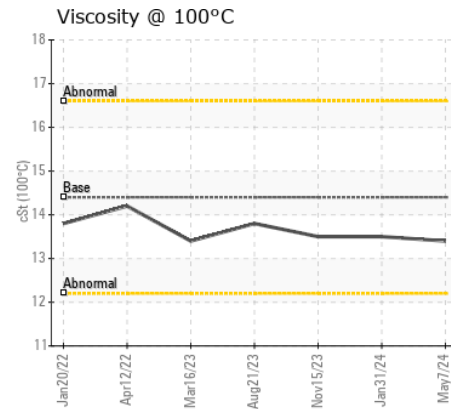
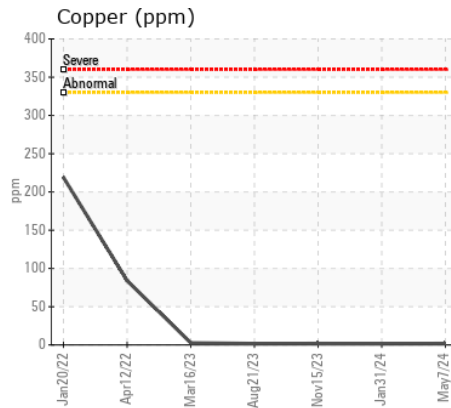
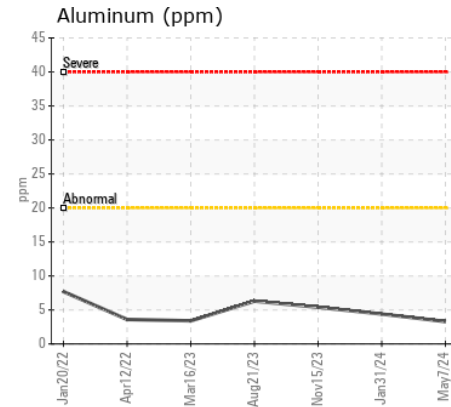
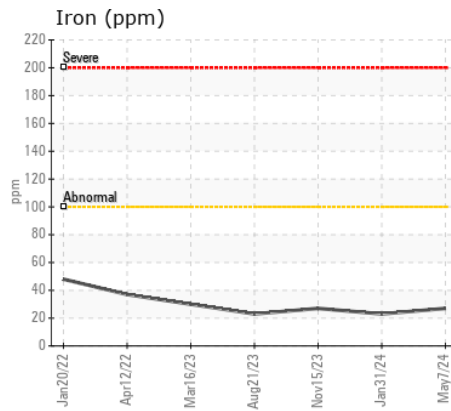
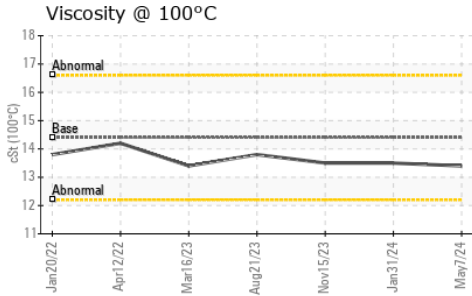
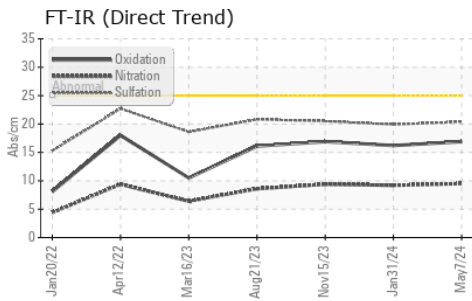
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	4	4	4
Potassium	ppm	ASTM D5185(m)	>20	4	6	9
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	0.4	0.5
Nitration	Abs/cm	ASTM D7624*	>20	9.5	9.2	9.4
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.4	19.9	20.5
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	6	8
Boron	ppm	ASTM D5185(m)	250	6	6	5
Barium	ppm	ASTM D5185(m)	10	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	100	60	59	60
Manganese	ppm	ASTM D5185(m)		<1	0	0
Magnesium	ppm	ASTM D5185(m)	450	958	925	955
Calcium	ppm	ASTM D5185(m)	3000	1136	1104	1094
Phosphorus	ppm	ASTM D5185(m)	1150	981	990	981
Zinc	ppm	ASTM D5185(m)	1350	1185	1158	1215
Sulfur	ppm	ASTM D5185(m)	4250	2429	2560	2453
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.9	16.2	16.9
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	13.4	13.5	13.5



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0093971
Lab Number : 02633989
Unique Number : 5775142
Test Package : MOB 1
Received : 08 May 2024
Tested : 08 May 2024
Diagnosed : 08 May 2024 - Wes Davis

GFL Environmental - 777 - Belleville-Municipal waste
 197 Putman Industrial Road
 Belleville, ON
 CA K8N 4Z6
 Contact: Ian Patton
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 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.