

Area
[1213205]

Machine Id
810050

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		GFL0093958	GFL0093927	GFL0062938
Sample Date		Client Info		22 Jan 2024	01 Nov 2023	17 Aug 2023
Machine Age	hrs	Client Info		4981	4445	3987
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	14	16	21
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	1
Nickel	ppm	ASTM D5185(m)	>4	<1	0	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	<1	<1
Aluminum	ppm	ASTM D5185(m)	>20	5	8	14
Lead	ppm	ASTM D5185(m)	>40	<1	<1	<1
Copper	ppm	ASTM D5185(m)	>330	2	2	3
Tin	ppm	ASTM D5185(m)	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

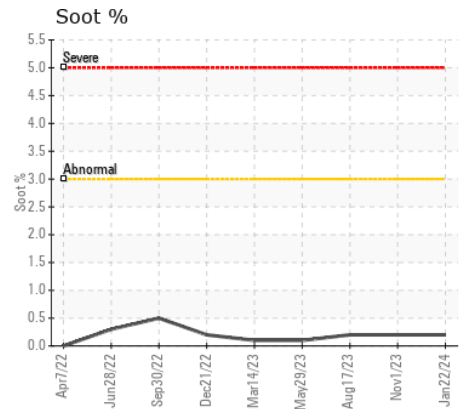
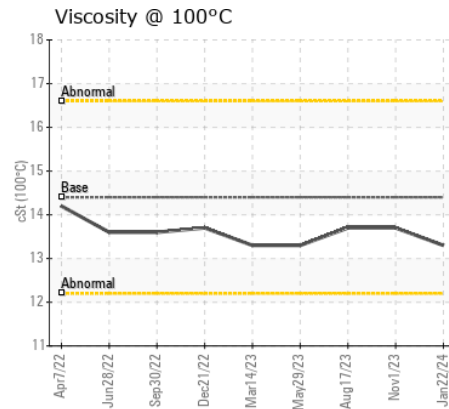
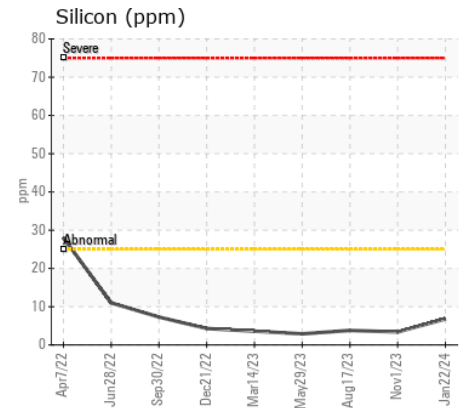
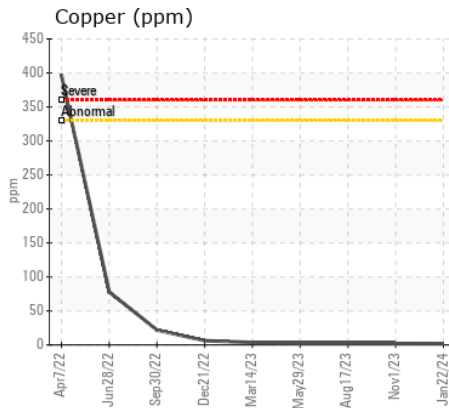
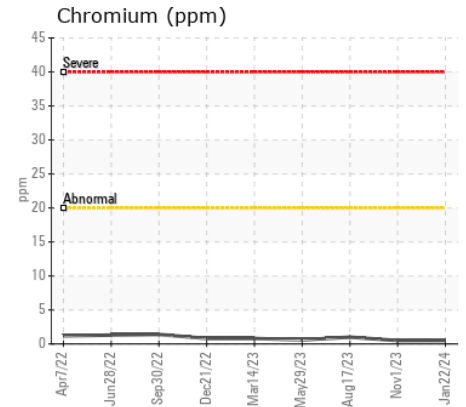
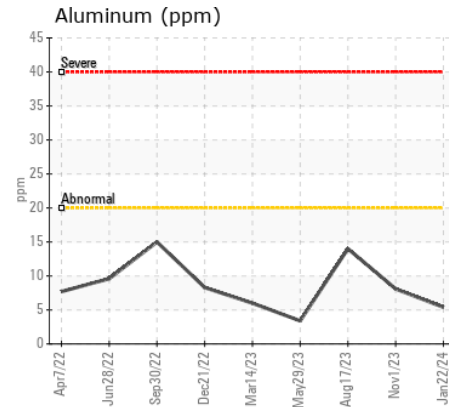
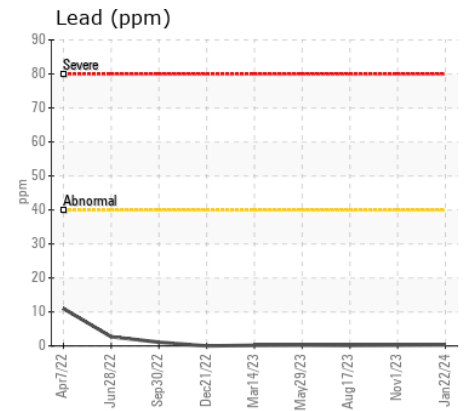
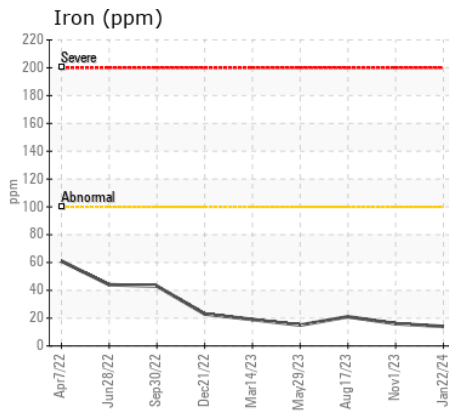
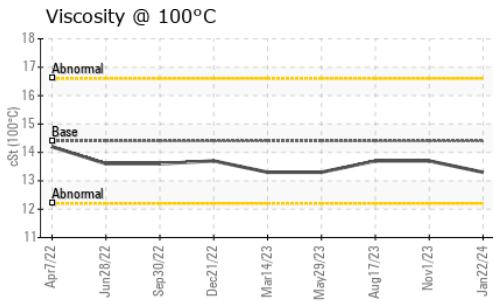
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	7	3	4
Potassium	ppm	ASTM D5185(m)	>20	7	13	27
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	0.2	0.2	0.2
Nitration	Abs/cm	ASTM D7624*	>20	9.6	9.3	9.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.4	20.4	21.6
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	8	9
Boron	ppm	ASTM D5185(m)	250	6	6	5
Barium	ppm	ASTM D5185(m)	10	0	<1	0
Molybdenum	ppm	ASTM D5185(m)	100	59	66	60
Manganese	ppm	ASTM D5185(m)		0	0	<1
Magnesium	ppm	ASTM D5185(m)	450	926	1063	978
Calcium	ppm	ASTM D5185(m)	3000	1114	1194	1087
Phosphorus	ppm	ASTM D5185(m)	1150	983	1101	1038
Zinc	ppm	ASTM D5185(m)	1350	1153	1331	1208
Sulfur	ppm	ASTM D5185(m)	4250	2564	2679	2406
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.9	17.9	17.7
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	13.3	13.7	13.7



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 777 - Belleville-Municipal waste
Sample No. : GFL0093958 **Received** : 24 Jan 2024 197 Putman Industrial Road
Lab Number : 02610821 **Diagnosed** : 24 Jan 2024 Belleville, ON
Unique Number : 5711907 **Diagnostician** : Wes Davis CA K8N 4Z6
Test Package : MOB 1

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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