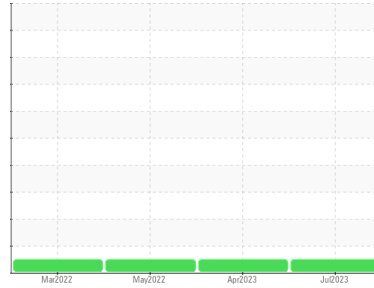




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
810048

Component
Diesel Engine

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

DIAGNOSIS

Recommendation

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

Wear

All component wear rates are normal.

Contamination

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Fluid Condition

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

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			GFL0062925	GFL0062914	GFL0041310
Sample Date	Client Info			11 Jul 2023	19 Apr 2023	04 May 2022
Machine Age	hrs	Client Info		3941	3397	1101
Oil Age	hrs	Client Info		0	0	0
Oil Changed	Client Info			N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<1.0	<1.0	<1.0
Glycol	WC Method			NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	17	16	35
Chromium	ppm	ASTM D5185(m)	>20	1	<1	1
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	<1	0
Silver	ppm	ASTM D5185(m)	>3	<1	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	6	4	8
Lead	ppm	ASTM D5185(m)	>40	0	0	3
Copper	ppm	ASTM D5185(m)	>330	2	2	95
Tin	ppm	ASTM D5185(m)	>15	<1	<1	<1
Antimony	ppm	ASTM D5185(m)		<1	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	250	10	8	25
Barium	ppm	ASTM D5185(m)	10	0	0	2
Molybdenum	ppm	ASTM D5185(m)	100	61	60	68
Manganese	ppm	ASTM D5185(m)		<1	<1	2
Magnesium	ppm	ASTM D5185(m)	450	937	941	909
Calcium	ppm	ASTM D5185(m)	3000	1091	1132	1186
Phosphorus	ppm	ASTM D5185(m)	1150	1024	1065	979
Zinc	ppm	ASTM D5185(m)	1350	1166	1188	1159
Sulfur	ppm	ASTM D5185(m)	4250	2471	2578	2218
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

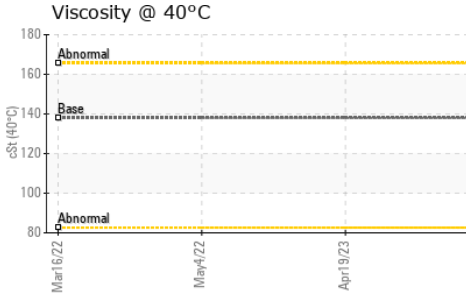
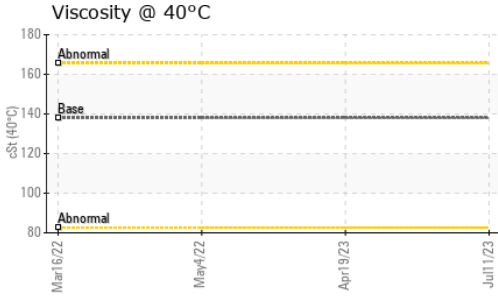
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	6	5	11
Sodium	ppm	ASTM D5185(m)	>216	7	6	7
Potassium	ppm	ASTM D5185(m)	>20	11	6	4

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0.3	0.3	0.2
Nitration	Abs/cm	ASTM D7624*	>20	9.1	8.8	8.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.2	19.6	22.5

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.2	15.8	16.7



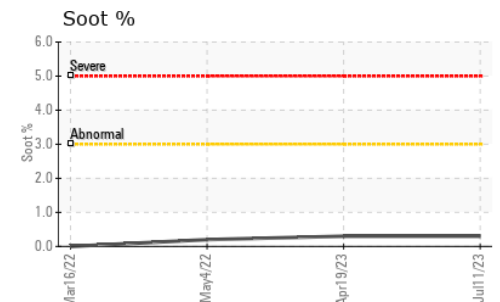
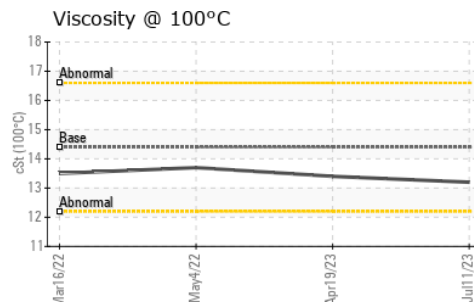
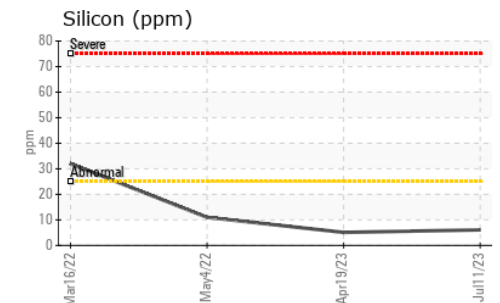
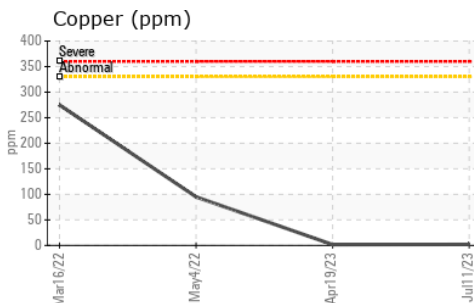
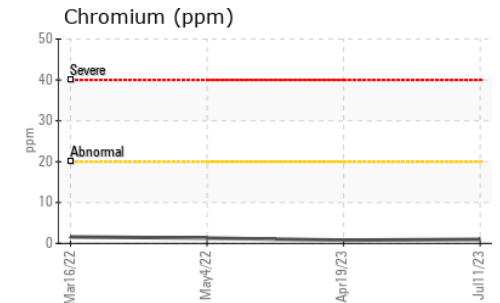
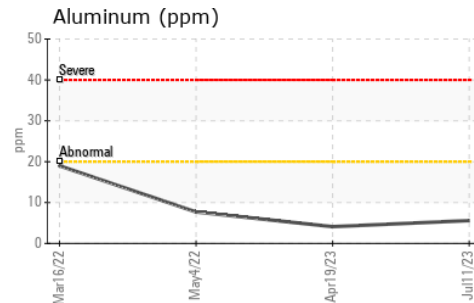
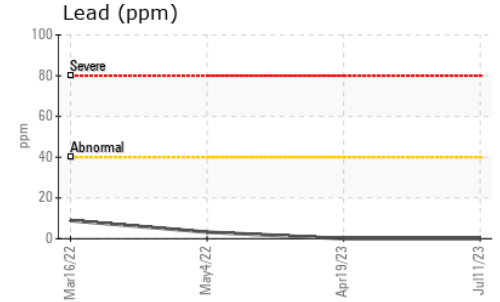
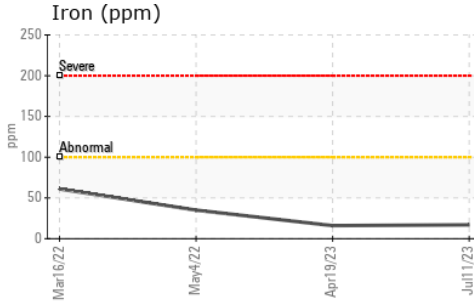
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	138	91.1	---
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	13.2	13.4
Viscosity Index (VI)	Scale	ASTM D2270*	102	144	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 777 - Belleville-Municipal waste
Sample No. : GFL0062925 **Received** : 18 Jul 2023
Lab Number : 02570573 **Diagnosed** : 18 Jul 2023
Unique Number : 5607619 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: KV40, VI)

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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