



Machine Id
5687
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 10W30 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0100829	GFL0085797	GFL0085816
Sample Date		Client Info		14 Dec 2023	03 Oct 2023	31 Jul 2023
Machine Age	hrs	Client Info		879530	20493	20020
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>120	14	14	14
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	<1	1	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	2	2	<1
Lead	ppm	ASTM D5185(m)	>40	<1	<1	<1
Copper	ppm	ASTM D5185(m)	>330	6	4	4
Tin	ppm	ASTM D5185(m)	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

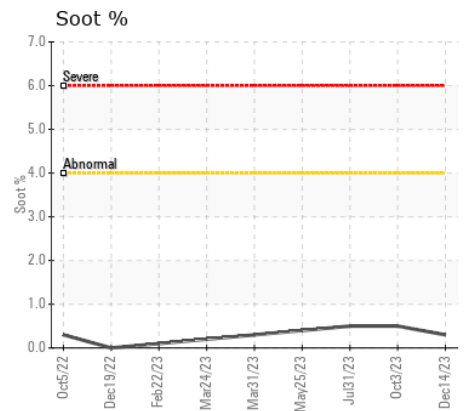
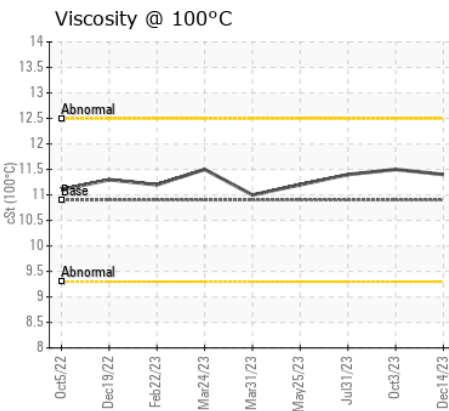
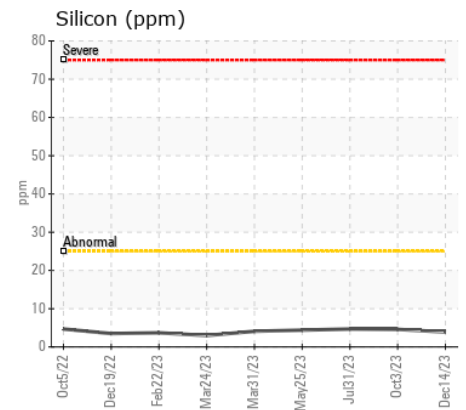
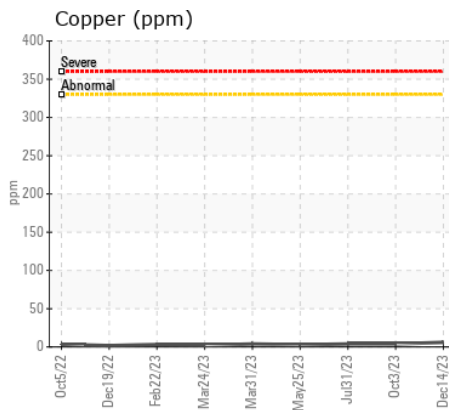
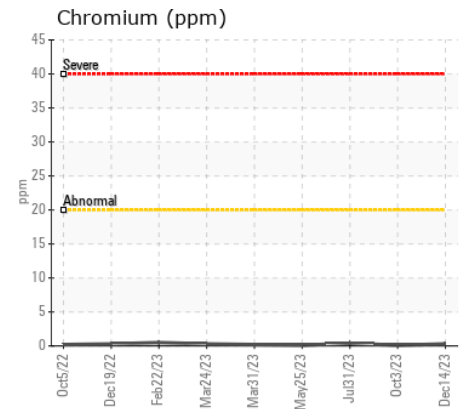
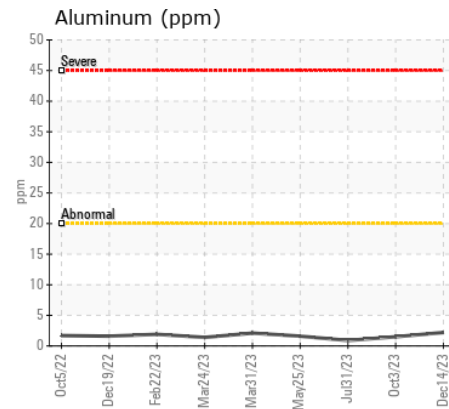
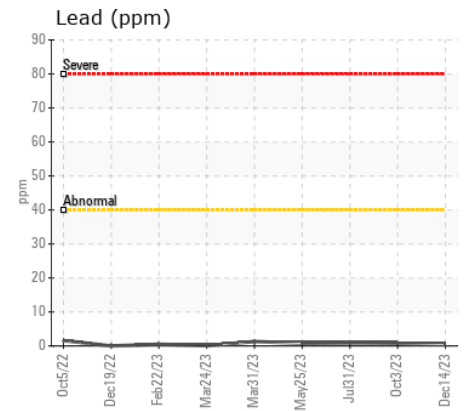
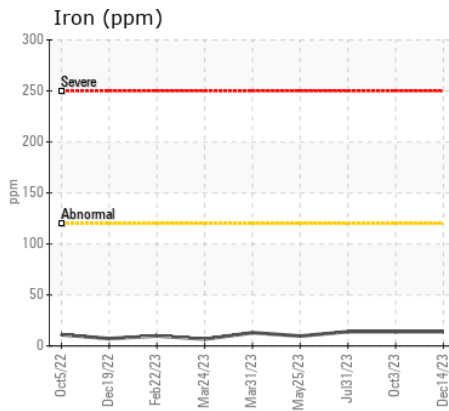
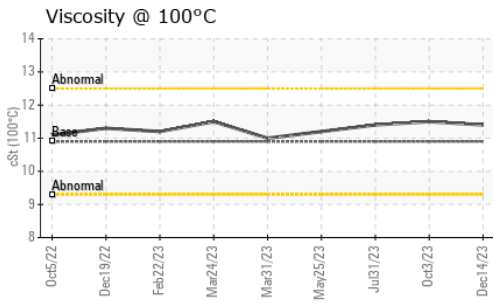
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	4	5	5
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>4	0.3	0.5	0.5
Nitration	Abs/cm	ASTM D7624*	>20	9.0	8.9	9.1
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.9	20.6	22.2
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)		4	4	5
Boron	ppm	ASTM D5185(m)	250	1	2	3
Barium	ppm	ASTM D5185(m)	10	0	0	0
Molybdenum	ppm	ASTM D5185(m)	100	58	62	61
Manganese	ppm	ASTM D5185(m)		0	0	<1
Magnesium	ppm	ASTM D5185(m)	450	947	1013	996
Calcium	ppm	ASTM D5185(m)	3000	1056	1108	1085
Phosphorus	ppm	ASTM D5185(m)	1150	978	1004	1034
Zinc	ppm	ASTM D5185(m)	1350	1149	1235	1196
Sulfur	ppm	ASTM D5185(m)	4250	2489	2348	2292
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.5	16.8	17.6
Visc @ 100°C	cSt	ASTM D7279(m)	10.9	11.4	11.5	11.4



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 520 - Winterburn
Sample No. : GFL0100829 **Received** : 24 Jan 2024
Lab Number : 02610837 **Diagnosed** : 24 Jan 2024
Unique Number : 5719932 **Diagnostician** : Wes Davis
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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