



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
501140
Component
Diesel Engine
Fluid
SHELL 10W30 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0100858	GFL0100870	GFL0085791
Sample Date		Client Info		23 Jan 2024	14 Nov 2023	28 Aug 2023
Machine Age	hrs	Client Info		14380	605488	13397
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	13	10	11
Chromium	ppm	ASTM D5185(m)	>20	<1	0	<1
Nickel	ppm	ASTM D5185(m)	>5	2	1	2
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	<1	<1
Aluminum	ppm	ASTM D5185(m)	>20	3	2	2
Lead	ppm	ASTM D5185(m)	>40	<1	<1	<1
Copper	ppm	ASTM D5185(m)	>330	4	3	3
Tin	ppm	ASTM D5185(m)	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

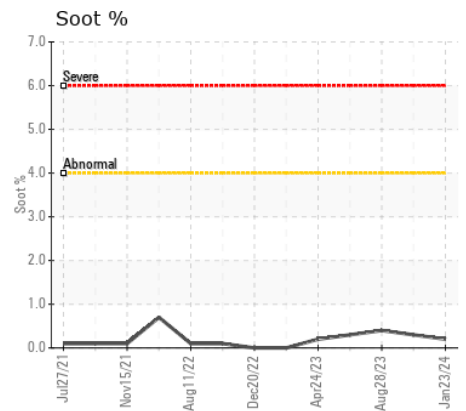
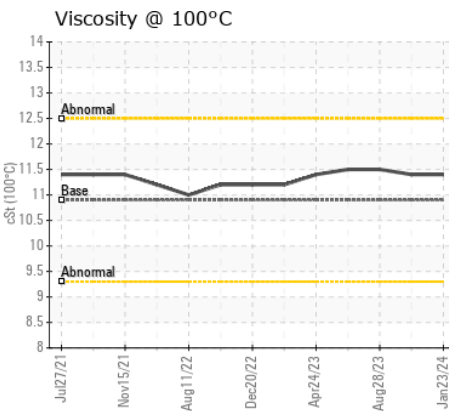
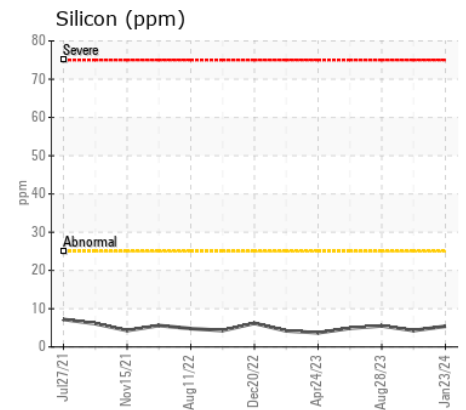
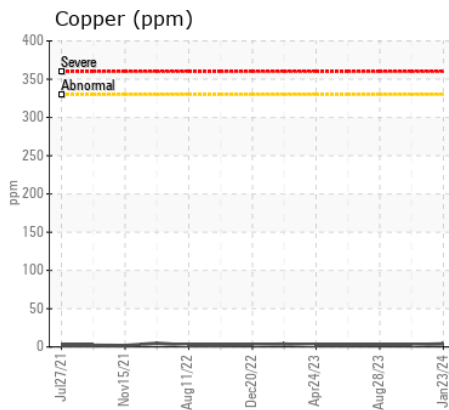
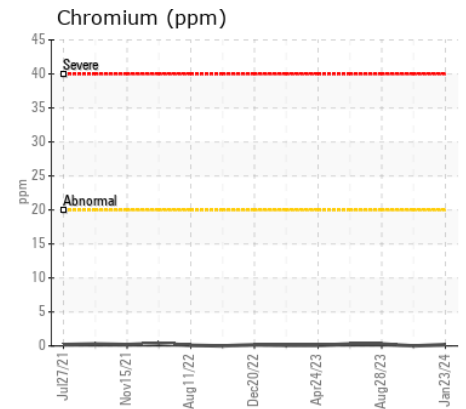
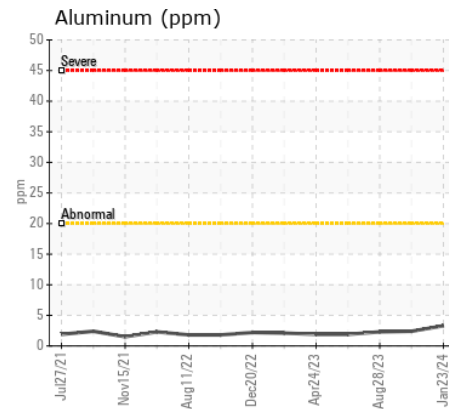
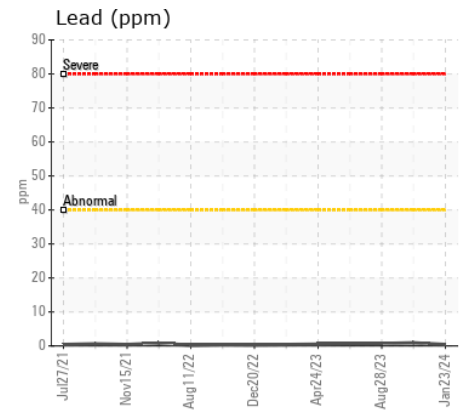
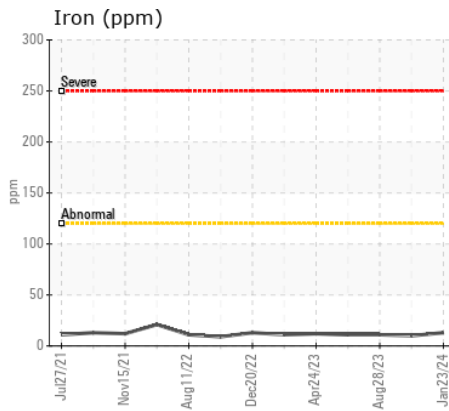
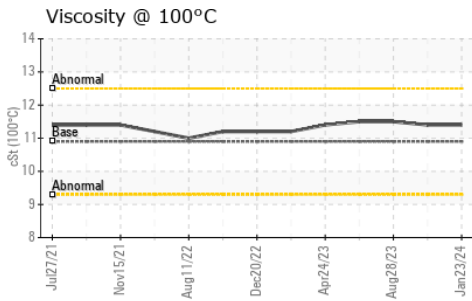
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	5	4	6
Potassium	ppm	ASTM D5185(m)	>20	2	2	2
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	0.2	0.3	0.4
Nitration	Abs/cm	ASTM D7624*	>20	9.0	8.9	9.1
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.3	20.6	22.4
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)		1	2	2
Barium	ppm	ASTM D5185(m)		0	<1	0
Molybdenum	ppm	ASTM D5185(m)		62	59	61
Manganese	ppm	ASTM D5185(m)		0	0	<1
Magnesium	ppm	ASTM D5185(m)	470	1021	979	1005
Calcium	ppm	ASTM D5185(m)	1150	1115	1049	1081
Phosphorus	ppm	ASTM D5185(m)	94	1048	979	1037
Zinc	ppm	ASTM D5185(m)	1030	1230	1194	1219
Sulfur	ppm	ASTM D5185(m)		2634	2395	2420
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.0	16.8	17.2
Visc @ 100°C	cSt	ASTM D7279(m)	10.90	11.4	11.4	11.5



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0100858
Lab Number : 02619873
Unique Number : 5736983
Test Package : MOB 1

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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.