



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
831027
Component
Diesel Engine
Fluid
RDL-3647 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0097973	GFL0098003	---
Sample Date		Client Info		07 May 2024	29 Jan 2024	---
Machine Age	hrs	Client Info		4147	0	---
Oil Age	hrs	Client Info		731	0	---
Filter Age	hrs	Client Info		731	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	ABNORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>80	12	25	---
Chromium	ppm	ASTM D5185(m)	>5	1	3	---
Nickel	ppm	ASTM D5185(m)	>2	<1	2	---
Titanium	ppm	ASTM D5185(m)		<1	5	---
Silver	ppm	ASTM D5185(m)	>3	<1	0	---
Aluminum	ppm	ASTM D5185(m)	>30	2	4	---
Lead	ppm	ASTM D5185(m)	>30	<1	2	---
Copper	ppm	ASTM D5185(m)	>150	3	9	---
Tin	ppm	ASTM D5185(m)	>5	<1	1	---
Vanadium	ppm	ASTM D5185(m)		0	0	---
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

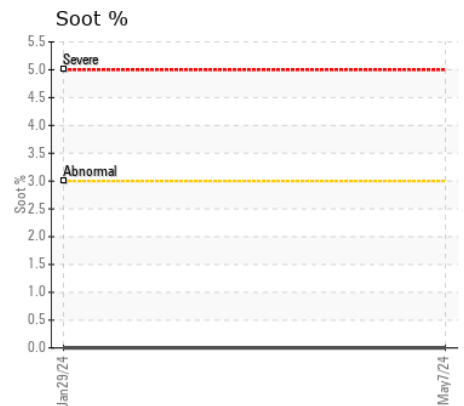
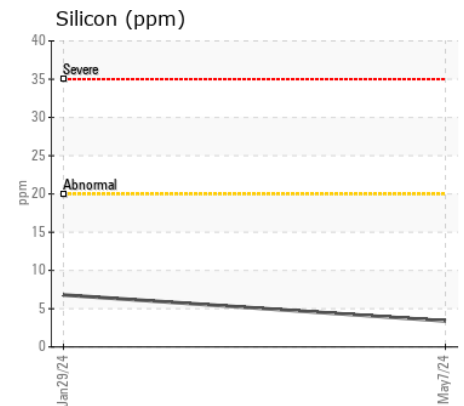
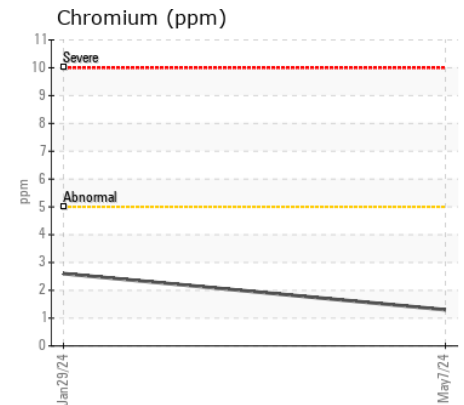
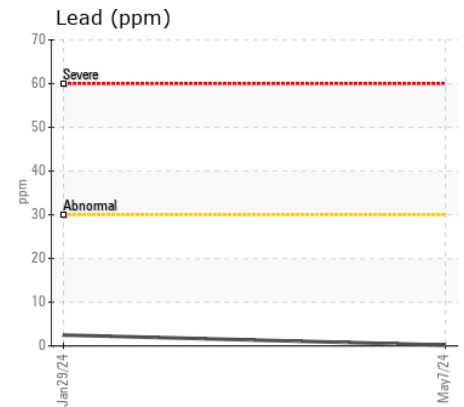
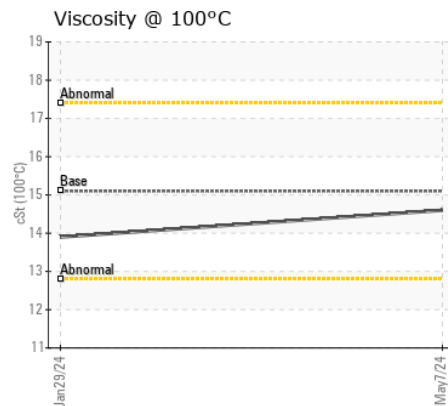
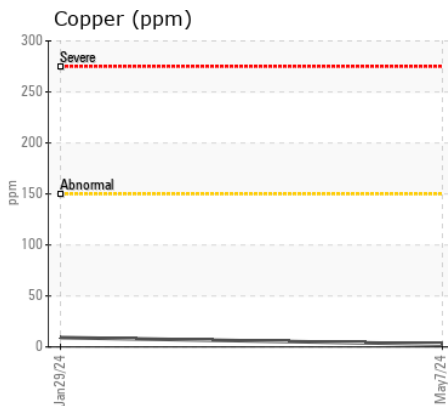
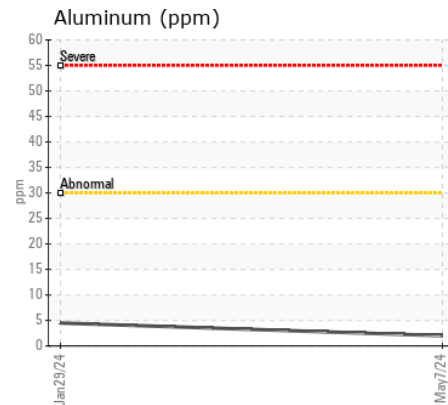
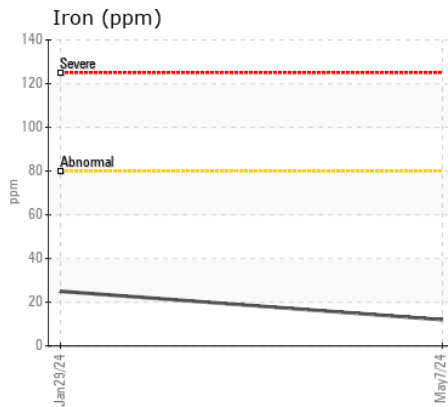
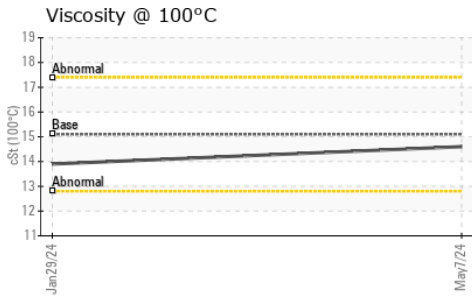
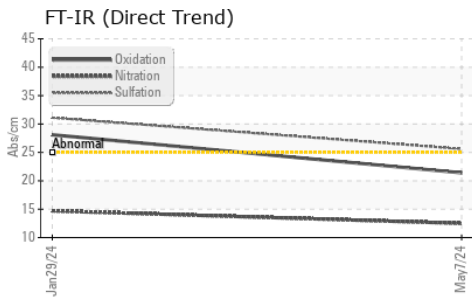
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>20	3	7	---
Potassium	ppm	ASTM D5185(m)	>20	<1	2	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	ASTM D7844*	>3	0	0	---
Nitration	Abs/cm	ASTM D7624*	>20	12.5	14.7	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	25.6	▲ 31.1	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	NORML	---
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	---

FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		9	11	---
Boron	ppm	ASTM D5185(m)	50	7	9	---
Barium	ppm	ASTM D5185(m)	5	<1	0	---
Molybdenum	ppm	ASTM D5185(m)	50	56	82	---
Manganese	ppm	ASTM D5185(m)	0	<1	2	---
Magnesium	ppm	ASTM D5185(m)	560	574	722	---
Calcium	ppm	ASTM D5185(m)	1510	1655	1777	---
Phosphorus	ppm	ASTM D5185(m)	780	686	860	---
Zinc	ppm	ASTM D5185(m)	870	934	1015	---
Sulfur	ppm	ASTM D5185(m)	2040	2058	2323	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	21.4	▲ 28.1	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.1	14.6	13.9	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0097973 **Received** : 02 Jul 2024
Lab Number : 02644785 **Tested** : 02 Jul 2024
Unique Number : 5802324 **Diagnosed** : 02 Jul 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: Visual)

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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