



Machine Id
731027
Component
Natural Gas Engine
Fluid
CASTROL 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0100752	GFL0100759	GFL0041636
Sample Date		Client Info		12 Apr 2024	01 Dec 2023	02 May 2023
Machine Age	kms	Client Info		85120	85120	70772
Oil Age	kms	Client Info		0	0	0
Filter Age	kms	Client Info		0	0	0
Oil Changed		Client Info		N/A	Changed	Changed
Filter Changed		Client Info		N/A	N/A	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>50	14	17	10
Chromium	ppm	ASTM D5185(m)	>4	<1	1	<1
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)	>3	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>9	5	4	2
Lead	ppm	ASTM D5185(m)	>30	<1	8	2
Copper	ppm	ASTM D5185(m)	>35	1	2	1
Tin	ppm	ASTM D5185(m)	>4	0	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

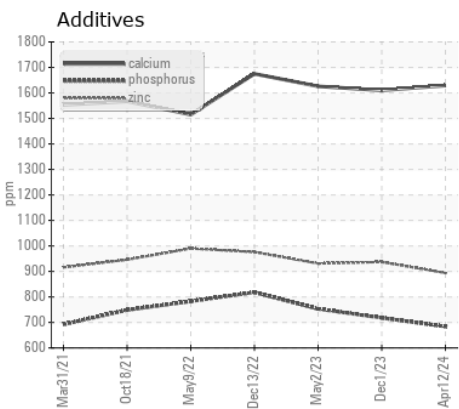
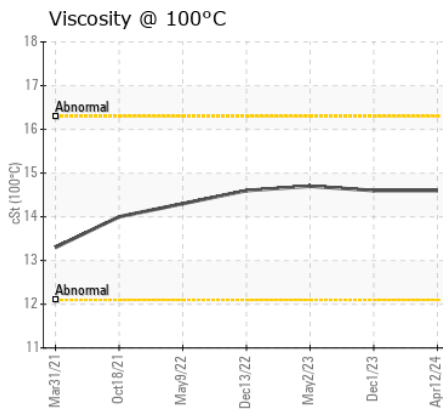
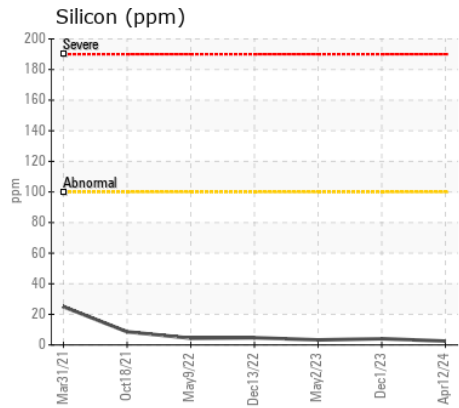
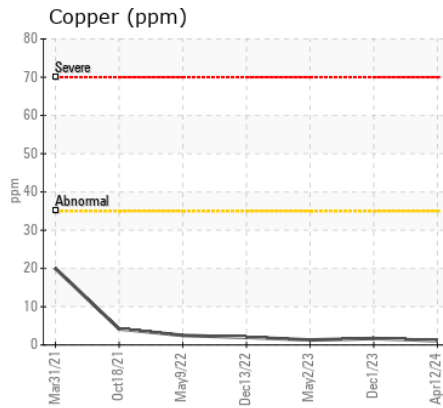
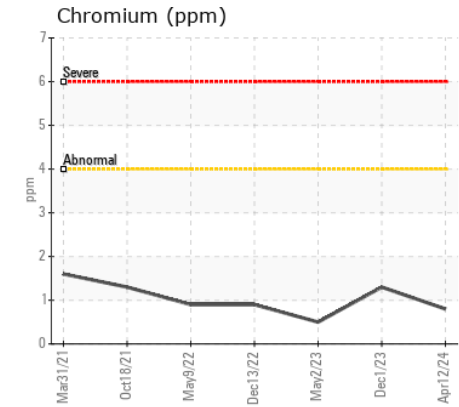
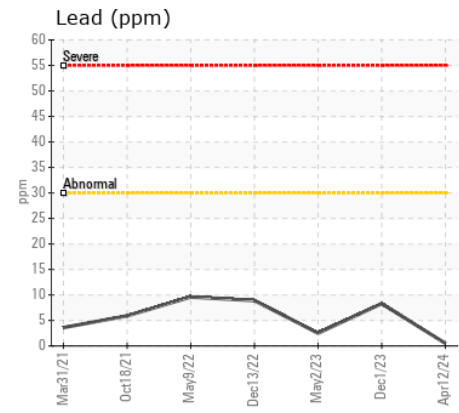
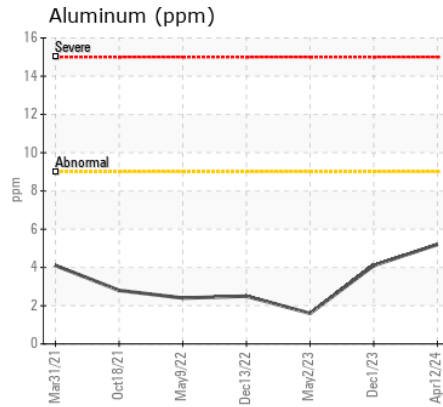
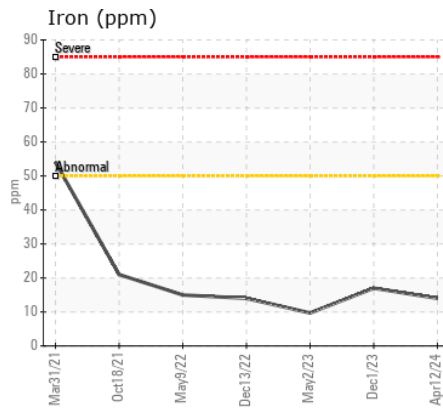
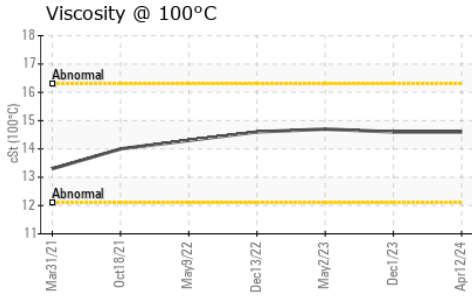
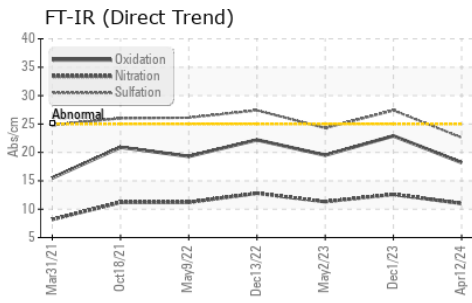
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>+100	2	4	3
Potassium	ppm	ASTM D5185(m)	>20	17	8	0
Water		WC Method	>0.1	NEG	NEG	NEG
Soot %	%	ASTM D7844*		0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	11.0	12.6	11.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	22.6	27.4	24.3
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)	>406	2	3	2
Boron	ppm	ASTM D5185(m)		9	6	8
Barium	ppm	ASTM D5185(m)		0	<1	0
Molybdenum	ppm	ASTM D5185(m)		50	54	53
Manganese	ppm	ASTM D5185(m)		<1	<1	<1
Magnesium	ppm	ASTM D5185(m)		505	553	567
Calcium	ppm	ASTM D5185(m)		1629	1610	1626
Phosphorus	ppm	ASTM D5185(m)		684	718	753
Zinc	ppm	ASTM D5185(m)		894	937	931
Sulfur	ppm	ASTM D5185(m)		1950	1954	2074
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.2	22.9	19.5
Visc @ 100°C	cSt	ASTM D7279(m)		14.6	14.6	14.7



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0100752
Lab Number : 02629116
Unique Number : 5762248
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.