



Machine Id
731026
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		GFL0100732	GFL0100761	GFL0041647
Sample Date		Client Info		25 Mar 2024	23 Nov 2023	12 Apr 2023
Machine Age	kms	Client Info		116672	106793	84303
Oil Age	kms	Client Info		0	0	0
Filter Age	kms	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	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	11	13	8
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	2	2	2
Lead	ppm	ASTM D5185(m)	>30	<1	11	3
Copper	ppm	ASTM D5185(m)	>35	<1	1	<1
Tin	ppm	ASTM D5185(m)	>4	0	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

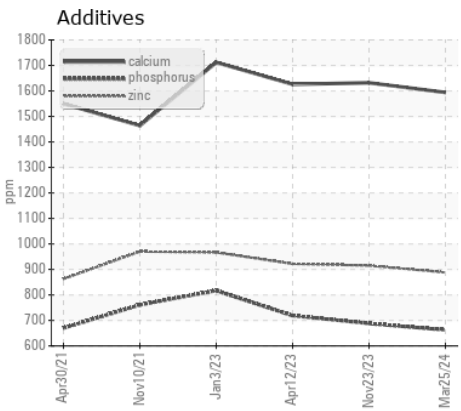
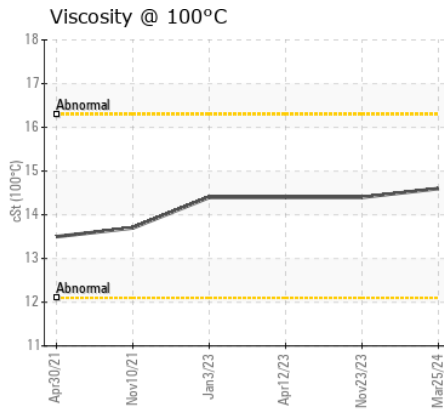
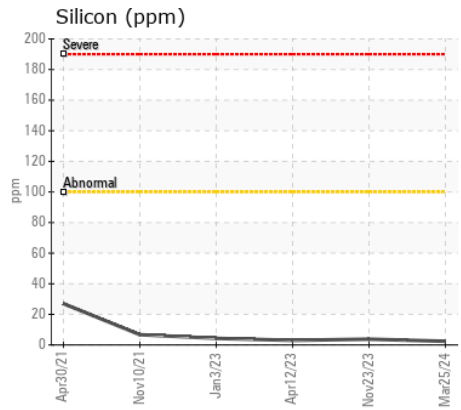
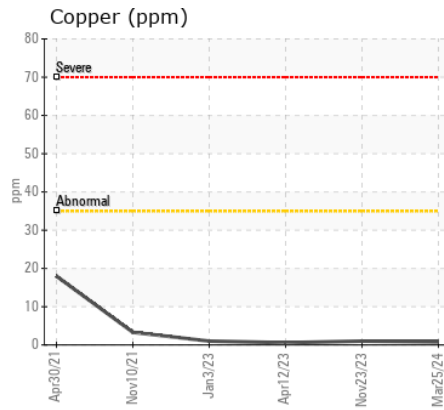
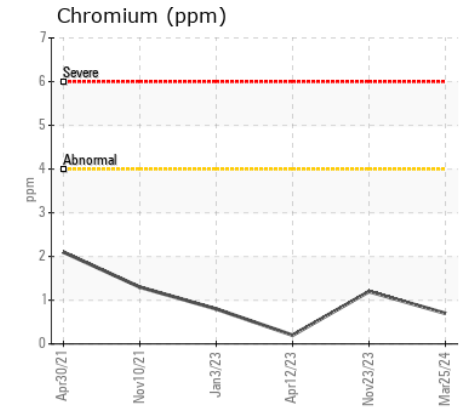
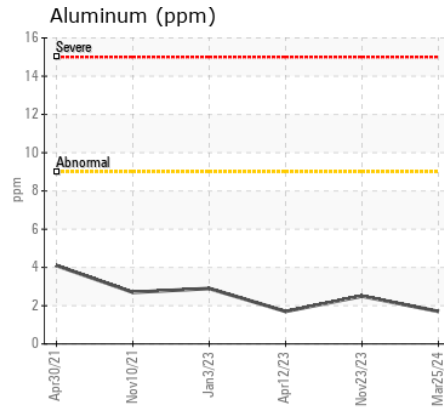
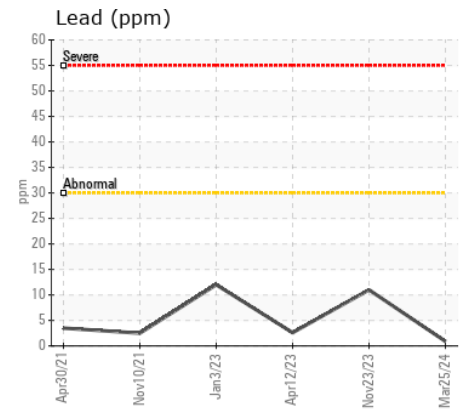
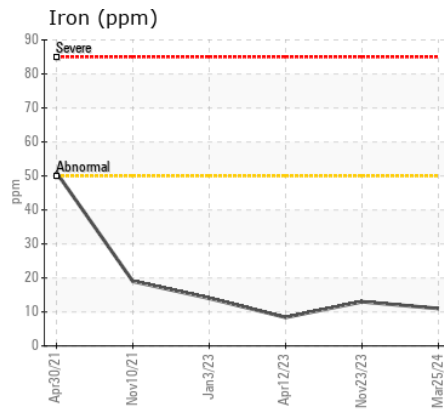
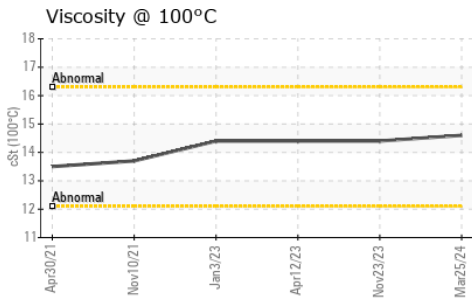
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>+100	2	4	3
Potassium	ppm	ASTM D5185(m)	>20	<1	0	0
Water		WC Method	>0.1	NEG	NEG	NEG
Soot %	%	ASTM D7844*		0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	11.4	12.3	11.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.8	26.9	25.0
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)		8	4	6
Barium	ppm	ASTM D5185(m)		0	<1	0
Molybdenum	ppm	ASTM D5185(m)		49	53	53
Manganese	ppm	ASTM D5185(m)		0	<1	<1
Magnesium	ppm	ASTM D5185(m)		499	550	558
Calcium	ppm	ASTM D5185(m)		1594	1632	1626
Phosphorus	ppm	ASTM D5185(m)		663	688	719
Zinc	ppm	ASTM D5185(m)		888	915	922
Sulfur	ppm	ASTM D5185(m)		1934	1925	2097
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.5	22.3	18.8
Visc @ 100°C	cSt	ASTM D7279(m)		14.6	14.4	14.4



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0100732
Lab Number : 02625119
Unique Number : 5750238
Test Package : MOB 1

GFL Environmental - 277 - Niagara Regional
 C/O Metro Truck Niagara Inc., 411 Glendale Avenue
 St. Catharines, ON
 CA L2P 3Y1
 Contact: Kelly Bremner
 kbremner@gflenv.com
 T: (437)235-6849
 F:

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.