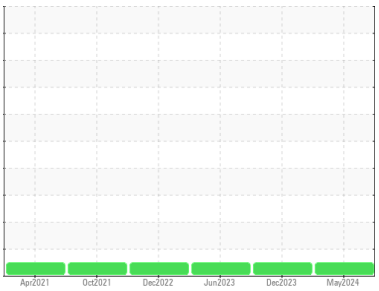
OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Machine Id
731017
Component
Natural Gas Engine
Fluid
CASTROL 15W40 (--- GAL)

DIAGNOSIS

Recommendation
Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

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.

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

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**GFL0100765**	GFL0079566	GFL0079565
Sample Date		Client Info		**29 May 2024**	21 Dec 2023	01 Jun 2023
Machine Age	kms	Client Info		**151198**	135339	115116
Oil Age	kms	Client Info		**0**	0	0
Oil Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**NORMAL**	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.1	**NEG**	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>50	**12**	19	12
Chromium	ppm	ASTM D5185(m)	>4	**<1**	2	<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**	0	0
Aluminum	ppm	ASTM D5185(m)	>9	**10**	34	2
Lead	ppm	ASTM D5185(m)	>30	**1**	8	4
Copper	ppm	ASTM D5185(m)	>35	**1**	1	1
Tin	ppm	ASTM D5185(m)	>4	**<1**	1	<1
Antimony	ppm	ASTM D5185(m)		**0**	0	0
Vanadium	ppm	ASTM D5185(m)		**0**	0	0
Beryllium	ppm	ASTM D5185(m)		**0**	0	0
Cadmium	ppm	ASTM D5185(m)		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		**7**	7	4
Barium	ppm	ASTM D5185(m)		**0**	0	0
Molybdenum	ppm	ASTM D5185(m)		**54**	57	58
Manganese	ppm	ASTM D5185(m)		**<1**	<1	<1
Magnesium	ppm	ASTM D5185(m)		**569**	595	608
Calcium	ppm	ASTM D5185(m)		**1681**	1789	1748
Phosphorus	ppm	ASTM D5185(m)		**671**	799	789
Zinc	ppm	ASTM D5185(m)		**929**	981	970
Sulfur	ppm	ASTM D5185(m)		**1991**	2199	2102
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

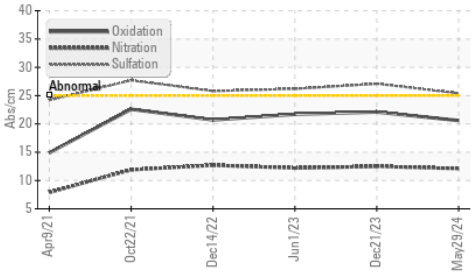
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>+100	**3**	5	4
Sodium	ppm	ASTM D5185(m)	>406	**3**	4	2
Potassium	ppm	ASTM D5185(m)	>20	**18**	87	0

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*		**0**	0	0
Nitration	Abs/cm	ASTM D7624*	>20	**12.1**	12.5	12.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	**25.4**	27.1	26.2

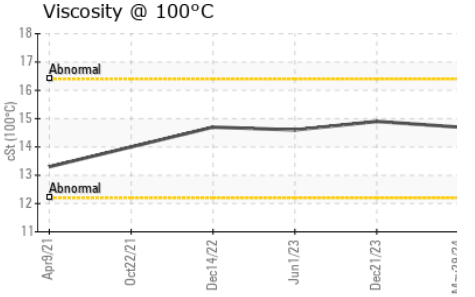
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	**20.6**	22.1	21.7

OIL ANALYSIS REPORT

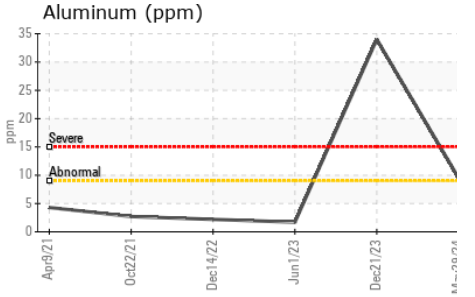
FT-IR (Direct Trend)



Viscosity @ 100°C



Aluminum (ppm)

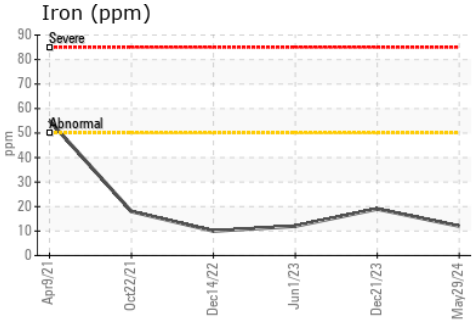


VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.1	**NEG**	NEG	NEG
Free Water	scalar	Visual*		**NEG**	NEG	NEG

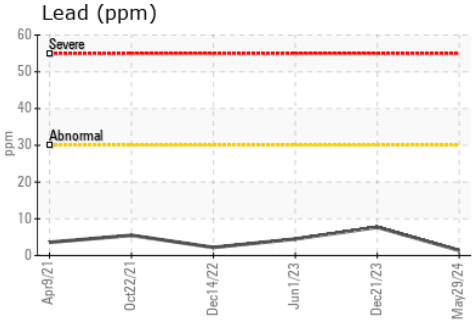
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)		**14.7**	14.9	14.6

GRAPHS

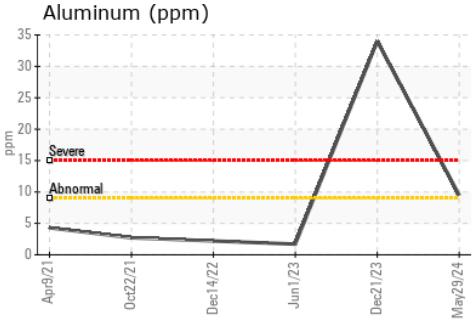
Iron (ppm)



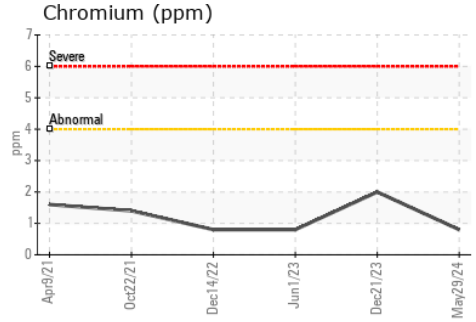
Lead (ppm)



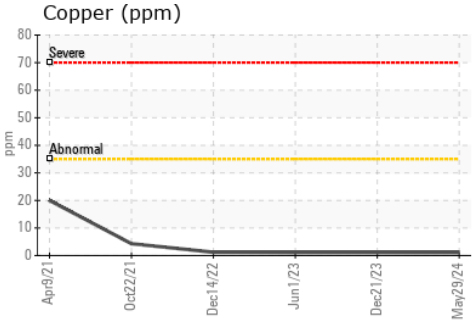
Aluminum (ppm)



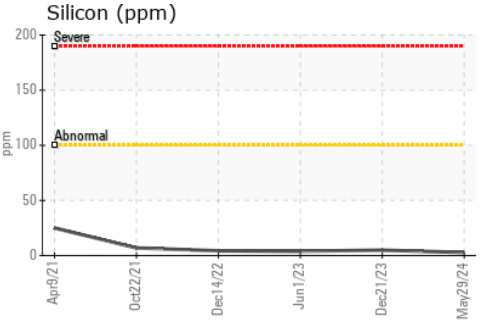
Chromium (ppm)



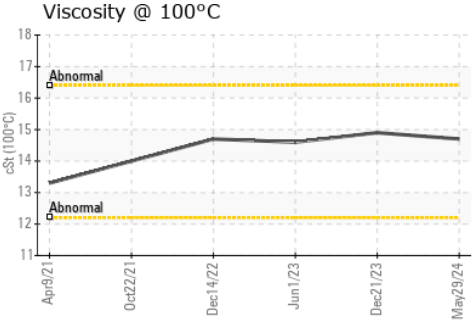
Copper (ppm)



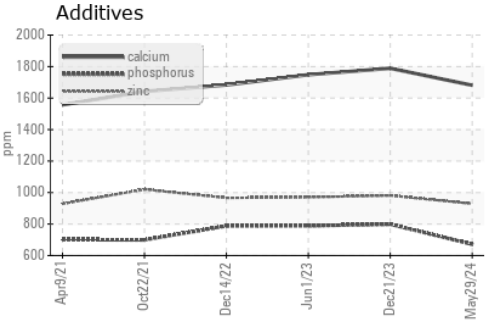
Silicon (ppm)



Viscosity @ 100°C



Additives



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0100765
Lab Number : 02639074
Unique Number : 5788236
Test Package : MOB 1

Received : 31 May 2024
Tested : 31 May 2024
Diagnosed : 31 May 2024 - Kevin Marson

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.