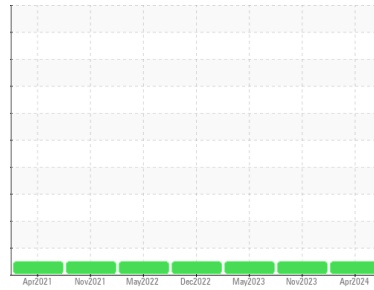




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
731019
 Component
Natural Gas Engine
 Fluid
CASTROL 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

Metal levels are typical for a new component breaking in.

Contamination

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		GFL0100743	GFL0100760	GFL0079559
Sample Date	Client Info		30 Apr 2024	24 Nov 2023	13 May 2023
Machine Age	kms	Client Info	101795	86855	73871
Oil Age	kms	Client Info	0	0	0
Oil Changed	Client Info		Changed	Changed	N/A
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	9	10	9
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	1	2	1
Lead	ppm	ASTM D5185(m)	>30	0	2	<1
Copper	ppm	ASTM D5185(m)	>35	<1	1	<1
Tin	ppm	ASTM D5185(m)	>4	0	<1	<1
Antimony	ppm	ASTM D5185(m)		0	0	<1
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)		11	6	9
Barium	ppm	ASTM D5185(m)		0	<1	0
Molybdenum	ppm	ASTM D5185(m)		51	52	51
Manganese	ppm	ASTM D5185(m)		<1	0	<1
Magnesium	ppm	ASTM D5185(m)		525	538	534
Calcium	ppm	ASTM D5185(m)		1606	1637	1600
Phosphorus	ppm	ASTM D5185(m)		687	664	722
Zinc	ppm	ASTM D5185(m)		910	907	917
Sulfur	ppm	ASTM D5185(m)		1951	1922	2064
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>+100	2	4	3
Sodium	ppm	ASTM D5185(m)	>406	2	2	2
Potassium	ppm	ASTM D5185(m)	>20	<1	0	0

INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*		0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	10.4	12.1	10.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	22.4	24.9	22.1

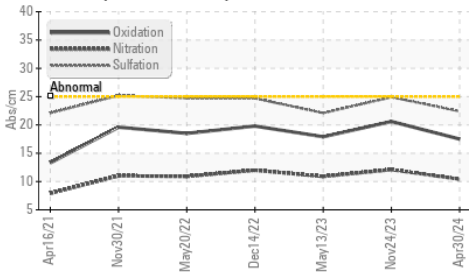
FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.5	20.6	17.9

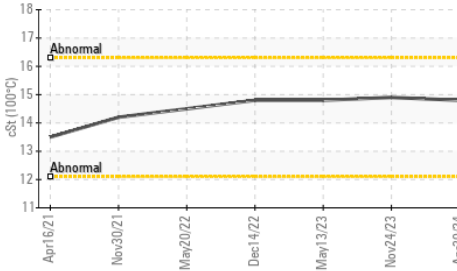


OIL ANALYSIS REPORT

FT-IR (Direct Trend)



Viscosity @ 100°C

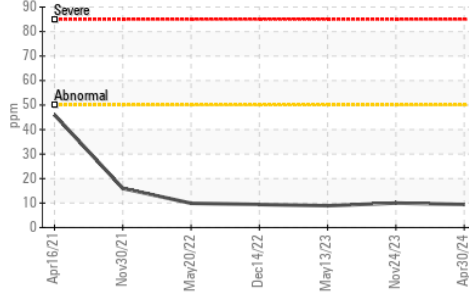


VISUAL	method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

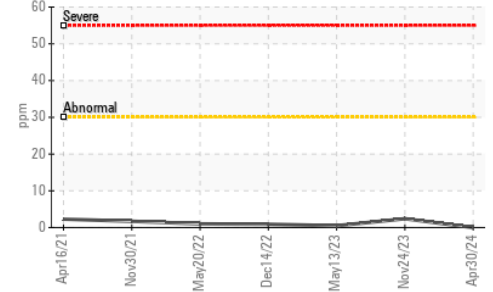
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	14.8	14.9	14.8

GRAPHS

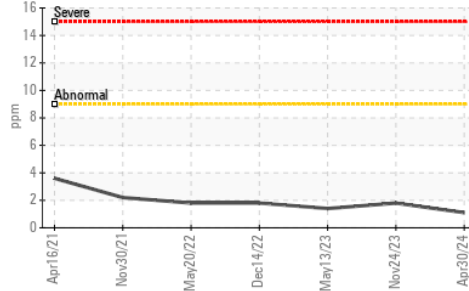
Iron (ppm)



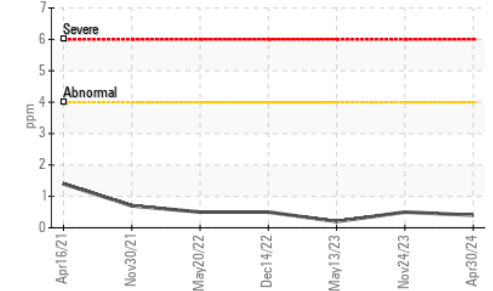
Lead (ppm)



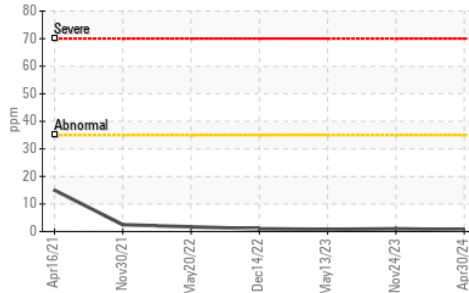
Aluminum (ppm)



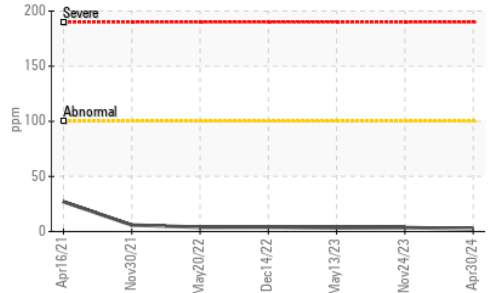
Chromium (ppm)



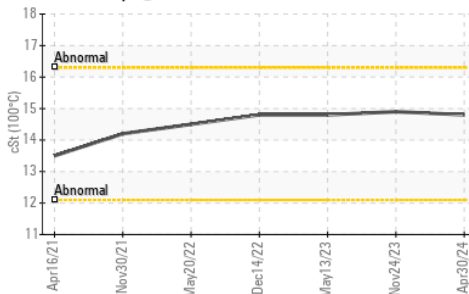
Copper (ppm)



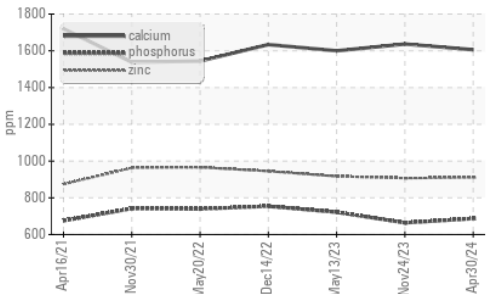
Silicon (ppm)



Viscosity @ 100°C



Additives



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0100743
Lab Number : 02633399
Unique Number : 5774552
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.