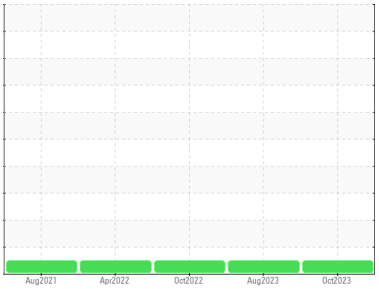
OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Machine Id
731001
Component
Natural Gas Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

DIAGNOSIS

Recommendation
Confirm the source of the lubricant being utilized for top-up/fill. 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
Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**GFL0079585**	GFL0079576	GFL0041660
Sample Date		Client Info		**04 Oct 2023**	08 Aug 2023	14 Oct 2022
Machine Age	kms	Client Info		**105130**	100564	81193
Oil Age	kms	Client Info		**0**	0	0
Oil Changed		Client Info		**Changed**	N/A	Changed
Sample Status				**NORMAL**	NORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>50	**8**	17	16
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	**<1**	0	0
Aluminum	ppm	ASTM D5185(m)	>9	**<1**	2	2
Lead	ppm	ASTM D5185(m)	>30	**<1**	2	<1
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)	0	**16**	8	8
Barium	ppm	ASTM D5185(m)	0	**<1**	0	0
Molybdenum	ppm	ASTM D5185(m)	60	**50**	58	58
Manganese	ppm	ASTM D5185(m)	0	**0**	<1	<1
Magnesium	ppm	ASTM D5185(m)	1010	**551**	628	629
Calcium	ppm	ASTM D5185(m)	1070	**1604**	1685	1742
Phosphorus	ppm	ASTM D5185(m)	1150	**746**	798	799
Zinc	ppm	ASTM D5185(m)	1270	**895**	999	982
Sulfur	ppm	ASTM D5185(m)	2060	**2002**	2116	2114
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

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

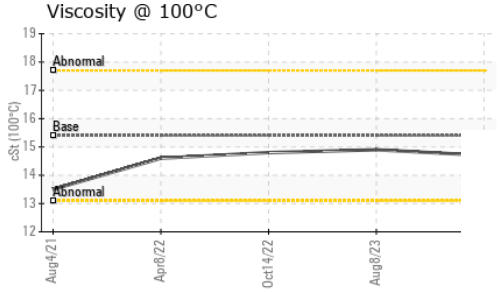
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*		**0**	0	0
Nitration	Abs/cm	ASTM D7624*	>20	**9.0**	12.5	12.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	**19.8**	27.1	26.9

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	**16.5**	21.9	22.6

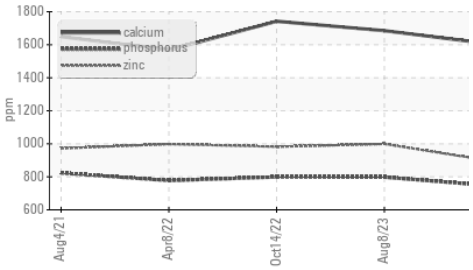
VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.1	**NEG**	NEG	NEG
Free Water	scalar	Visual*		**NEG**	NEG	NEG

OIL ANALYSIS REPORT

Viscosity @ 100°C



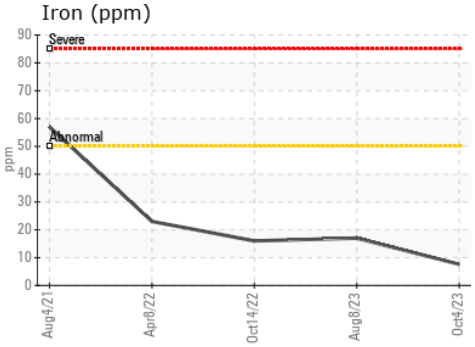
Additives



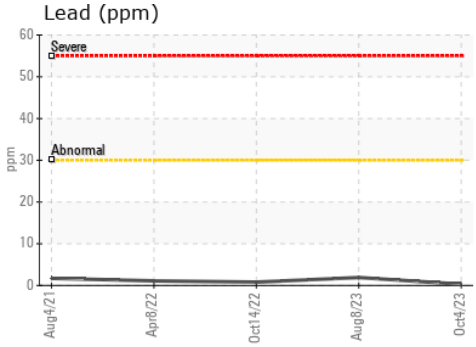
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	**14.7**	14.9	14.8

GRAPHS

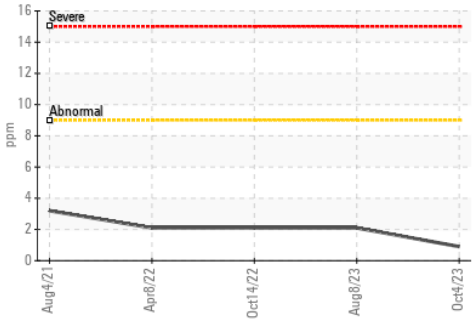
Iron (ppm)



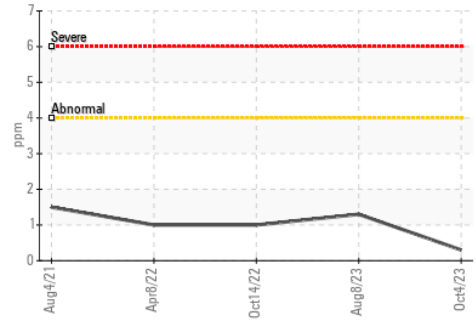
Lead (ppm)



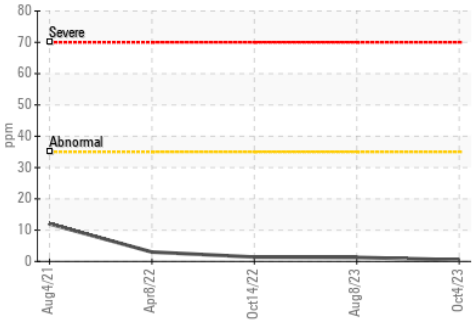
Aluminum (ppm)



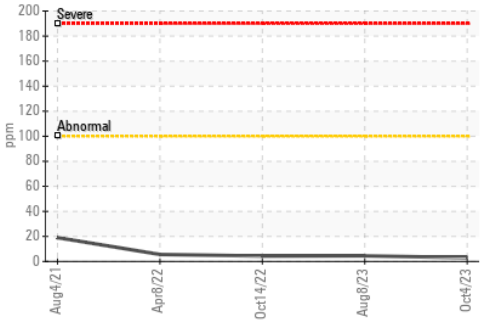
Chromium (ppm)



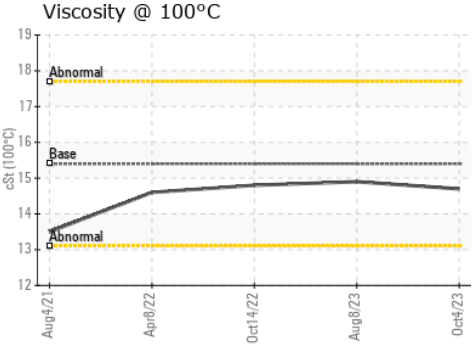
Copper (ppm)



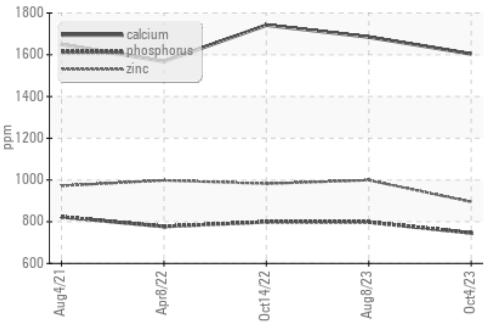
Silicon (ppm)



Viscosity @ 100°C



Additives



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 277 - Niagara Regional**
Sample No. : GFL0079585 **Received** : 05 Oct 2023
Lab Number : 02587123 **Diagnosed** : 05 Oct 2023
Unique Number : 5656189 **Diagnostician** : Kevin Marson
Test Package : MOB 1

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.