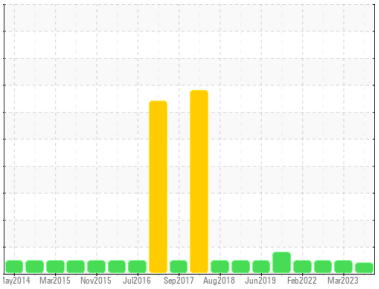
OIL ANALYSIS REPORT

Machine Id
7897
Component
Natural Gas Engine
Fluid
PETRO CANADA DURON HP 15W40 (24 LTR)

Sample Rating Trend



VISCOSITY

DIAGNOSIS

Recommendation

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. The fluid was specified as PETRO CANADA DURON HP 15W40, however, a fluid match indicates that this fluid is SAE 30 Diesel Engine Oil. Please confirm the oil type and grade on your next sample.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

Viscosity of sample indicates oil is within SAE 30 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**GFL0100754**	GFL0041634	GFL0041633
Sample Date		Client Info		**29 Nov 2023**	01 Mar 2023	16 Feb 2023
Machine Age	kms	Client Info		**210935**	216669	187872
Oil Age	kms	Client Info		**0**	0	187872
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**ABNORMAL**	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	**13**	13	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**	<1	<1
Silver	ppm	ASTM D5185(m)	>3	**<1**	0	0
Aluminum	ppm	ASTM D5185(m)	>9	**2**	2	2
Lead	ppm	ASTM D5185(m)	>30	**1**	<1	<1
Copper	ppm	ASTM D5185(m)	>35	**2**	2	1
Tin	ppm	ASTM D5185(m)	>4	**0**	0	<1
Antimony	ppm	ASTM D5185(m)		**0**	<1	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	**15**	9	12
Barium	ppm	ASTM D5185(m)	0	**<1**	0	0
Molybdenum	ppm	ASTM D5185(m)	60	**52**	55	52
Manganese	ppm	ASTM D5185(m)	0	**<1**	<1	<1
Magnesium	ppm	ASTM D5185(m)	1010	**584**	617	553
Calcium	ppm	ASTM D5185(m)	1070	**1508**	1626	1597
Phosphorus	ppm	ASTM D5185(m)	1150	**779**	800	769
Zinc	ppm	ASTM D5185(m)	1270	**957**	972	930
Sulfur	ppm	ASTM D5185(m)	2060	**2055**	2144	2069
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>+100	**6**	6	3
Sodium	ppm	ASTM D5185(m)		**6**	4	4
Potassium	ppm	ASTM D5185(m)	>20	**<1**	3	<1

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*		**0**	0	0
Nitration	Abs/cm	ASTM D7624*	>20	**11.5**	12.0	10.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	**18.2**	24.2	22.9

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	**17.4**	19.1	17.7

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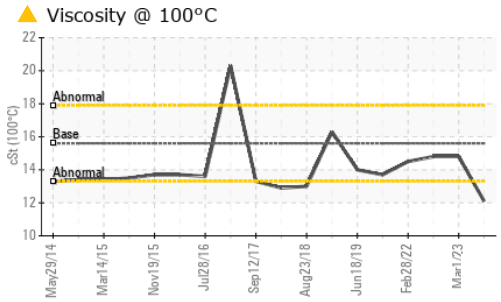
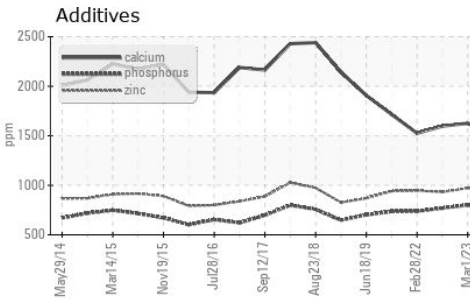
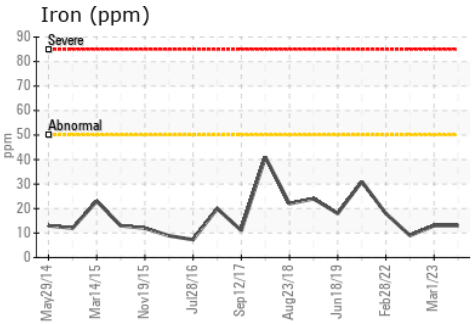


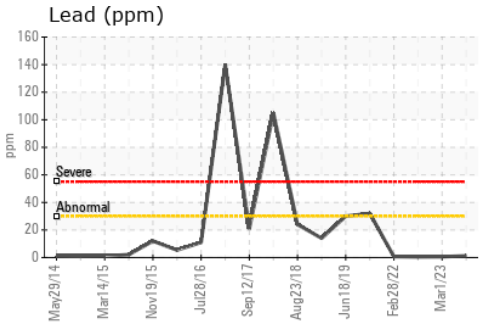


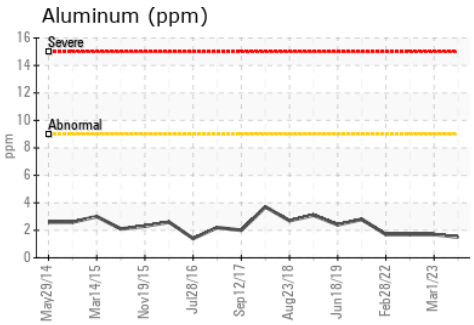
VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.1	**NEG**	NEG	NEG
Free Water	scalar	Visual*		**NEG**	NEG	NEG

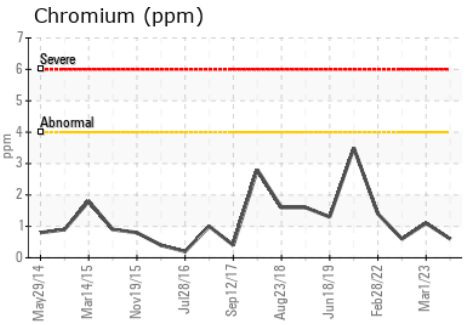
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	▲ **12.1**	14.8	14.8

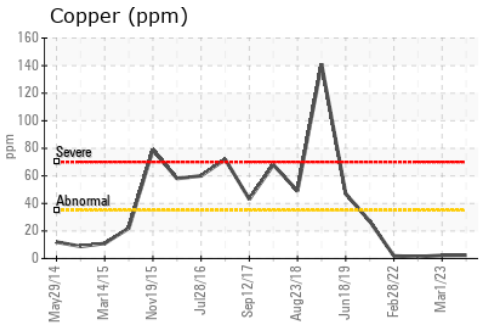
GRAPHS

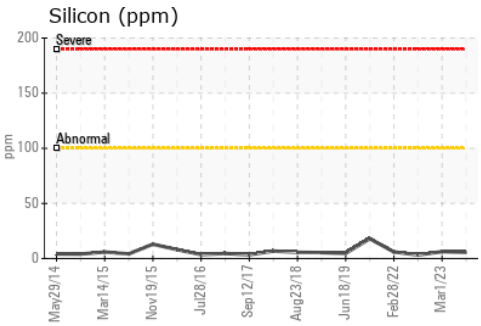


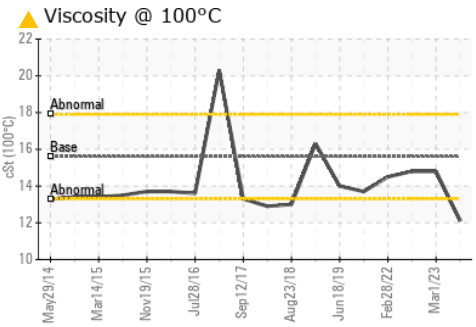


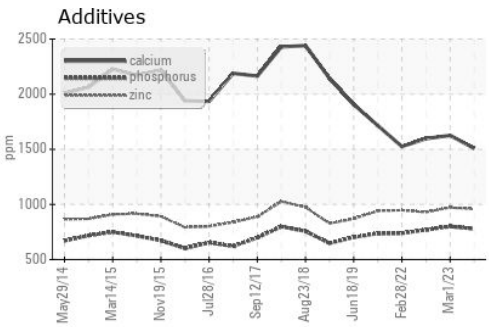












ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 277 - Niagara Regional**
Sample No. : GFL0100754 **Received** : 04 Dec 2023
Lab Number : 02600463 **Diagnosed** : 07 Dec 2023
Unique Number : 5685543 **Diagnostician** : Kevin Marson
Test Package : MOB 1

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St. Catharines, ON
CA L2P 3Y1
Contact: Kelly Bremner
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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.