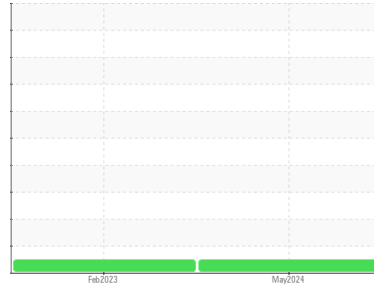




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
INTERNATIONAL 828108
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON HP 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		GFL0122274	GFL0071112	---
Sample Date	Client Info		16 May 2024	03 Feb 2023	---
Machine Age	kms	Client Info	15493	277294	---
Oil Age	kms	Client Info	253	0	---
Oil Changed	Client Info		Changed	N/A	---
Sample Status			NORMAL	NORMAL	---

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>2.0	<1.0	<1.0	---
Water	WC Method	>0.2	NEG	NEG	---
Glycol	WC Method		NEG	NEG	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >100	9	10	---
Chromium	ppm	ASTM D5185(m) >20	0	<1	---
Nickel	ppm	ASTM D5185(m) >4	0	<1	---
Titanium	ppm	ASTM D5185(m)	0	<1	---
Silver	ppm	ASTM D5185(m) >3	0	<1	---
Aluminum	ppm	ASTM D5185(m) >20	2	3	---
Lead	ppm	ASTM D5185(m) >40	0	0	---
Copper	ppm	ASTM D5185(m) >330	<1	<1	---
Tin	ppm	ASTM D5185(m) >15	0	<1	---
Antimony	ppm	ASTM D5185(m)	0	<1	---
Vanadium	ppm	ASTM D5185(m)	0	0	---
Beryllium	ppm	ASTM D5185(m)	0	0	---
Cadmium	ppm	ASTM D5185(m)	0	0	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 0	3	2	---
Barium	ppm	ASTM D5185(m) 0	0	0	---
Molybdenum	ppm	ASTM D5185(m) 60	59	60	---
Manganese	ppm	ASTM D5185(m) 0	0	<1	---
Magnesium	ppm	ASTM D5185(m) 1010	951	962	---
Calcium	ppm	ASTM D5185(m) 1070	1034	1100	---
Phosphorus	ppm	ASTM D5185(m) 1150	955	1082	---
Zinc	ppm	ASTM D5185(m) 1270	1162	1196	---
Sulfur	ppm	ASTM D5185(m) 2060	2463	2645	---
Lithium	ppm	ASTM D5185(m)	<1	<1	---

CONTAMINANTS

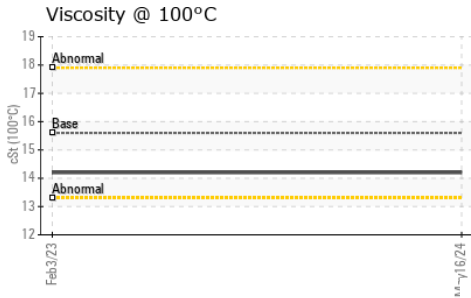
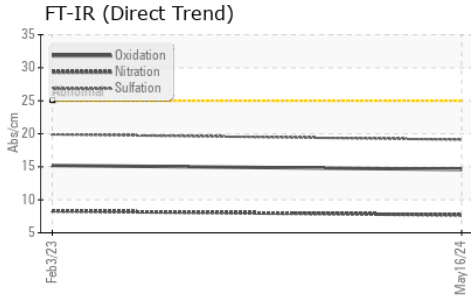
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	2	7	---
Sodium	ppm	ASTM D5185(m)	7	1	---
Potassium	ppm	ASTM D5185(m) >20	2	0	---

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >3	0.2	0.2	---
Nitration	Abs/cm	ASTM D7624* >20	7.7	8.3	---
Sulfation	Abs./1mm	ASTM D7415* >30	19.1	19.9	---



OIL ANALYSIS REPORT

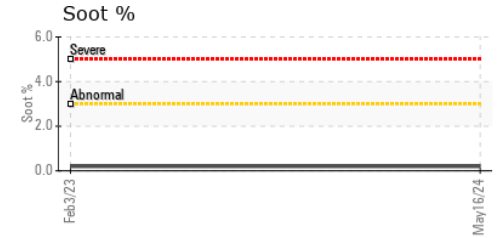
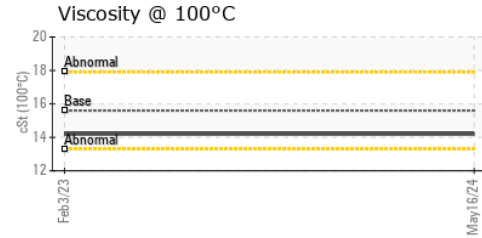
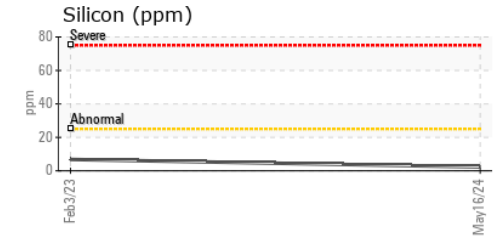
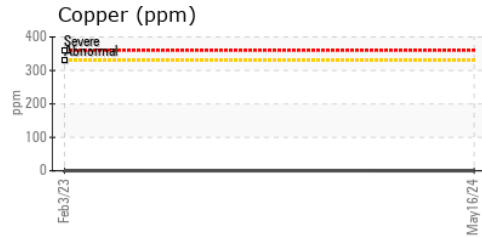
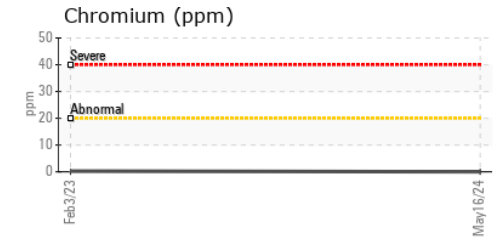
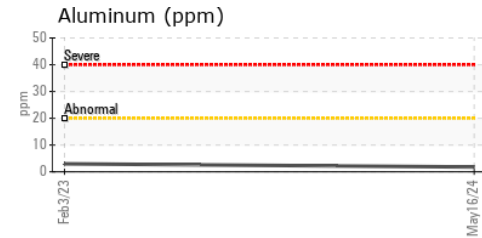
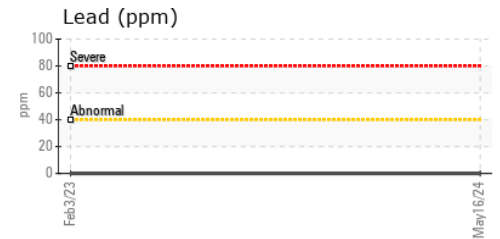
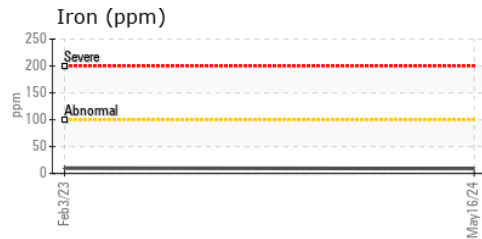


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	14.6	15.2	---

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---
Precipitate	scalar	Visual*	NONE	NONE	---	---
Silt	scalar	Visual*	NONE	VLITE	---	---
Debris	scalar	Visual*	NONE	VLITE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	NORML	---
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	---
Free Water	scalar	Visual*		NEG	NEG	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	14.2	14.2	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 987 - Charlottetown**
Sample No. : GFL0122274 **Received** : 24 May 2024 7 Superior Crescent
Lab Number : **02637368** **Tested** : 24 May 2024 Charlottetown, PE
Unique Number : 5786530 **Diagnosed** : 24 May 2024 - Wes Davis CA C1A 7N5
Test Package : MOB 1 (Additional Tests: Visual) Contact: Vicki Metcalfe
 vmetcalfe@gflenv.com

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.

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