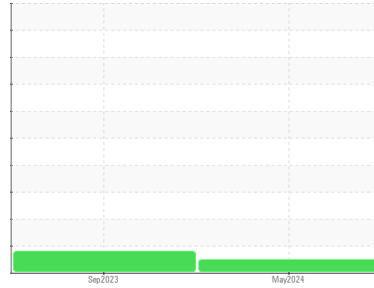




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

401103

Component

Diesel Engine

Fluid

PETRO CANADA DURON SHP 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Wear

All component wear rates are normal.

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		GFL0096839	GFL0084117	---
Sample Date	Client Info		13 May 2024	26 Sep 2023	---
Machine Age	kms	Client Info	0	1179168	---
Oil Age	kms	Client Info	0	0	---
Oil Changed	Client Info		Changed	N/A	---
Sample Status			NORMAL	MARGINAL	---

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	▲ 2.9	---
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	13	34
Chromium	ppm	ASTM D5185(m)	>20	0	1
Nickel	ppm	ASTM D5185(m)	>4	0	0
Titanium	ppm	ASTM D5185(m)		0	0
Silver	ppm	ASTM D5185(m)	>3	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	<1	2
Lead	ppm	ASTM D5185(m)	>40	1	2
Copper	ppm	ASTM D5185(m)	>330	<1	1
Tin	ppm	ASTM D5185(m)	>15	0	<1
Antimony	ppm	ASTM D5185(m)		0	0
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	4
Barium	ppm	ASTM D5185(m)	0	0	0
Molybdenum	ppm	ASTM D5185(m)	60	58	61
Manganese	ppm	ASTM D5185(m)	0	<1	<1
Magnesium	ppm	ASTM D5185(m)	1010	959	983
Calcium	ppm	ASTM D5185(m)	1070	1021	1081
Phosphorus	ppm	ASTM D5185(m)	1150	1007	1034
Zinc	ppm	ASTM D5185(m)	1270	1176	1221
Sulfur	ppm	ASTM D5185(m)	2060	2569	2663
Lithium	ppm	ASTM D5185(m)		<1	<1

CONTAMINANTS

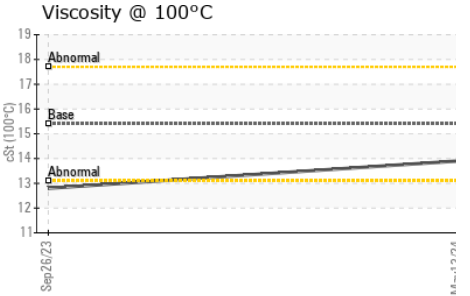
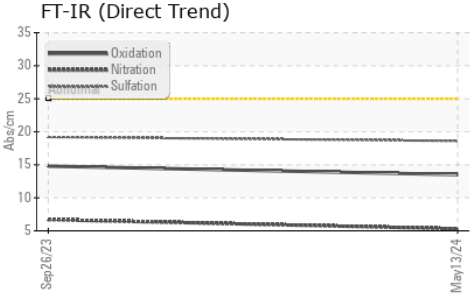
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	4	6
Sodium	ppm	ASTM D5185(m)		3	4
Potassium	ppm	ASTM D5185(m)	>20	<1	3

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0.1	0.5
Nitration	Abs/cm	ASTM D7624*	>20	5.3	6.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	18.6	19.2



OIL ANALYSIS REPORT

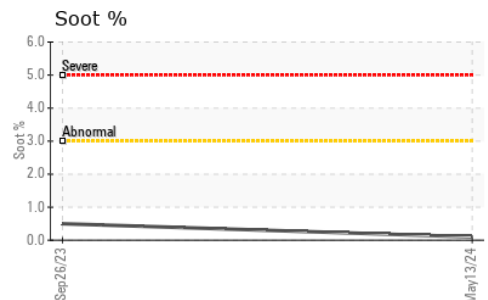
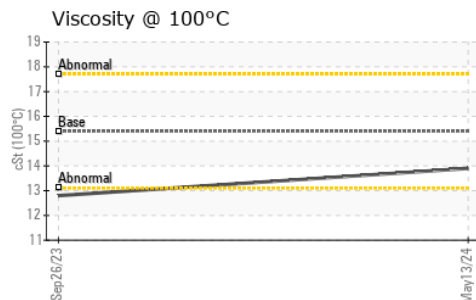
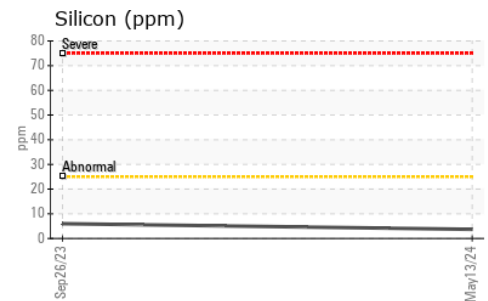
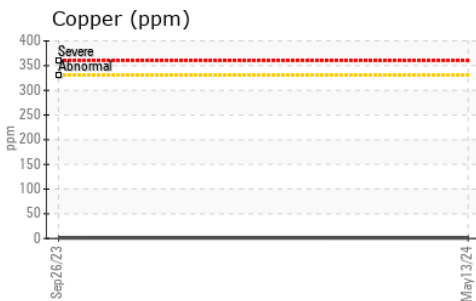
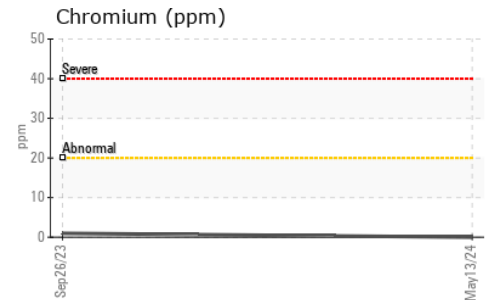
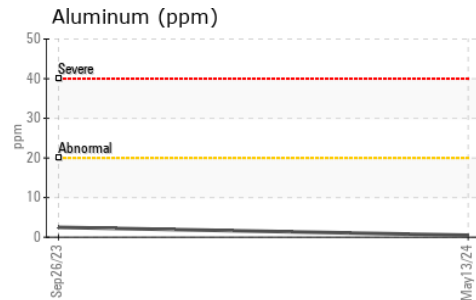
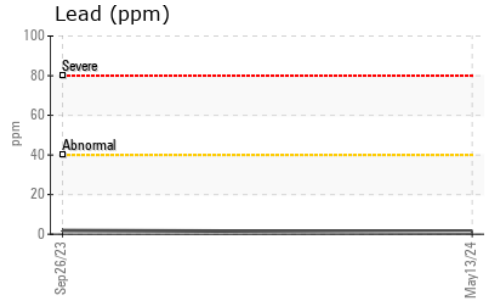
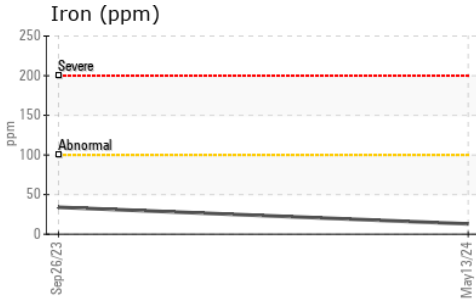


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	13.5	14.8	---

VISUAL		method	limit/base	current	history1	history2
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)	15.4	13.9	12.8	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 574 - Vancouver Fleet**
Sample No. : GFL0096839 **Received** : 22 May 2024 70 Golden Drive, Coquitlam, BC
Lab Number : **02636871** **Tested** : 22 May 2024 CA V3K 6B5
Unique Number : 5786033 **Diagnosed** : 22 May 2024 - Wes Davis
Test Package : MOB 1 Contact: Gary Ewasiuk gwasiuk@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.