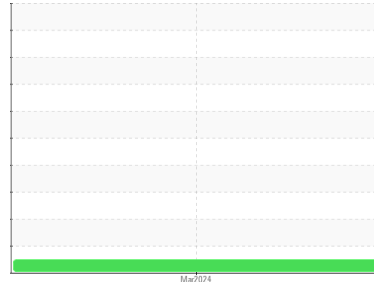




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
427010
 Component
Diesel 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

All component wear rates are normal.

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		GFL0102904	---	---
Sample Date	Client Info		12 Mar 2024	---	---
Machine Age	hrs	Client Info	32481	---	---
Oil Age	hrs	Client Info	0	---	---
Oil Changed	Client Info		N/A	---	---
Sample Status			NORMAL	---	---

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<1.0	---	---
Water	WC Method	>0.2	NEG	---	---
Glycol	WC Method		NEG	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >120	10	---	---
Chromium	ppm	ASTM D5185(m) >20	<1	---	---
Nickel	ppm	ASTM D5185(m) >5	<1	---	---
Titanium	ppm	ASTM D5185(m) >2	0	---	---
Silver	ppm	ASTM D5185(m) >2	0	---	---
Aluminum	ppm	ASTM D5185(m) >20	2	---	---
Lead	ppm	ASTM D5185(m) >40	<1	---	---
Copper	ppm	ASTM D5185(m) >330	<1	---	---
Tin	ppm	ASTM D5185(m) >15	0	---	---
Antimony	ppm	ASTM D5185(m)	0	---	---
Vanadium	ppm	ASTM D5185(m)	0	---	---
Beryllium	ppm	ASTM D5185(m)	0	---	---
Cadmium	ppm	ASTM D5185(m)	0	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 0	77	---	---
Barium	ppm	ASTM D5185(m) 0	0	---	---
Molybdenum	ppm	ASTM D5185(m) 60	20	---	---
Manganese	ppm	ASTM D5185(m) 0	0	---	---
Magnesium	ppm	ASTM D5185(m) 1010	265	---	---
Calcium	ppm	ASTM D5185(m) 1070	1950	---	---
Phosphorus	ppm	ASTM D5185(m) 1150	1013	---	---
Zinc	ppm	ASTM D5185(m) 1270	1144	---	---
Sulfur	ppm	ASTM D5185(m) 2060	2918	---	---
Lithium	ppm	ASTM D5185(m)	<1	---	---

CONTAMINANTS

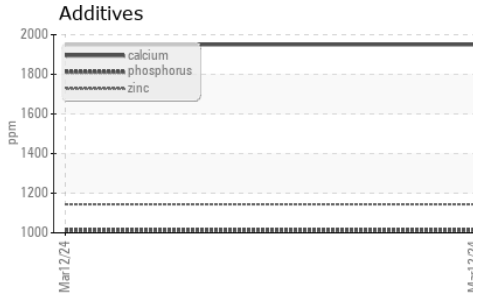
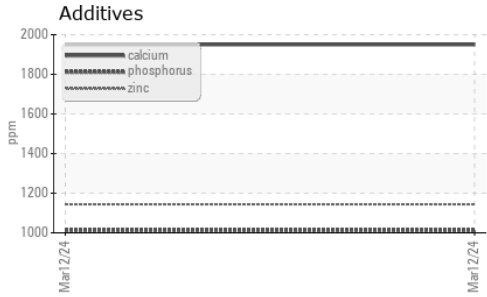
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	2	---	---
Sodium	ppm	ASTM D5185(m)	2	---	---
Potassium	ppm	ASTM D5185(m) >20	4	---	---

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >4	0.5	---	---
Nitration	Abs/cm	ASTM D7624* >20	8.1	---	---
Sulfation	Abs./1mm	ASTM D7415* >30	21.1	---	---



OIL ANALYSIS REPORT



FLUID DEGRADATION

Method	Limit/Base	Current	History1	History2
Oxidation	Abs./1mm ASTM D7414*	>25	16.1	---

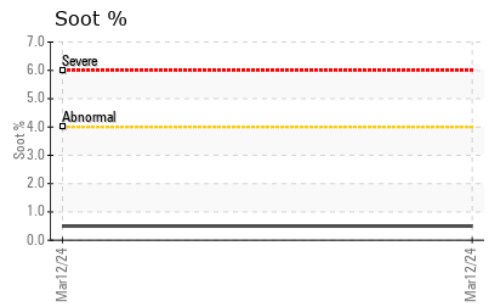
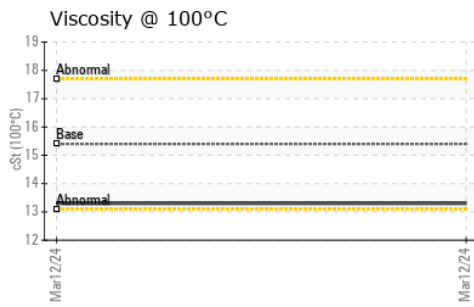
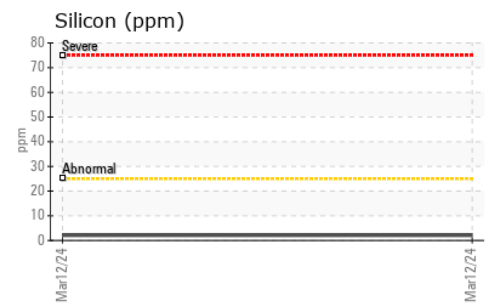
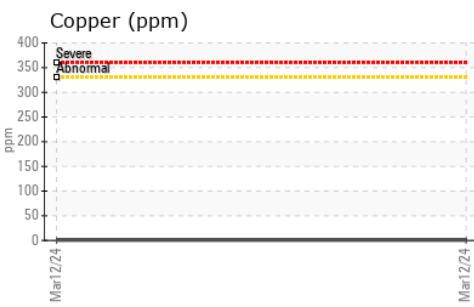
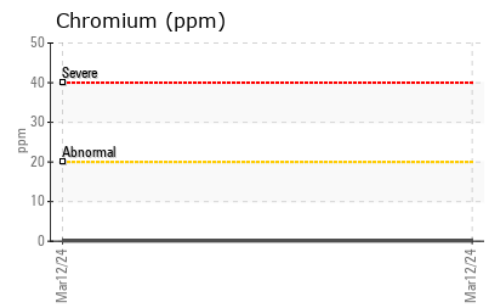
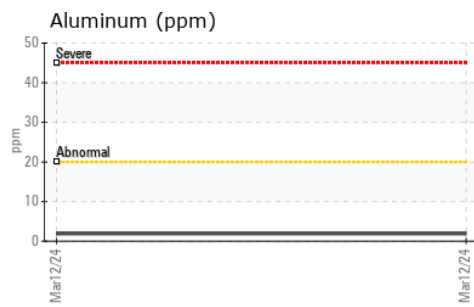
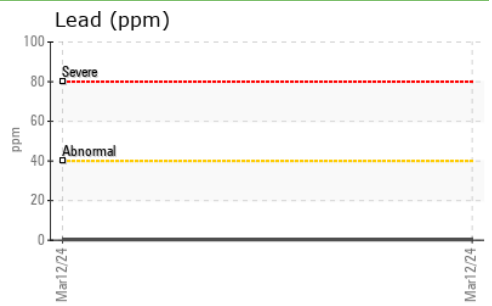
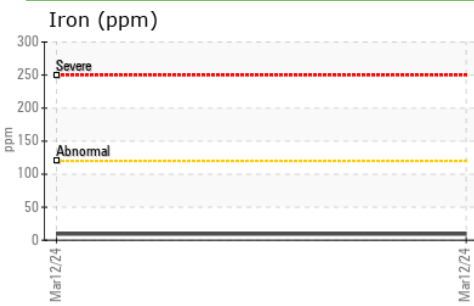
VISUAL

Method	Limit/Base	Current	History1	History2
Emulsified Water	scalar Visual*	>0.2	NEG	---
Free Water	scalar Visual*		NEG	---

FLUID PROPERTIES

Method	Limit/Base	Current	History1	History2
Visc @ 100°C	cSt ASTM D7279(m)	15.4	13.3	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0102904
Lab Number : 02621943
Unique Number : 5747062
Test Package : MOB 1

GFL Environmental - 246 - Windsor
 2700 Deziel Dr
 Windsor, ON
 CA N8W 5H8
 Contact: Dave Varga
 dvarga@gflenv.com
 T: (519)944-8009
 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.