

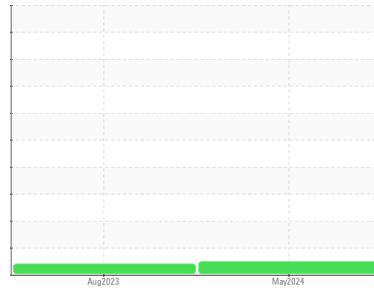


OIL ANALYSIS REPORT



Machine Id
WL0424
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

Sample Rating Trend



NORMAL



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		GFL0100613	GFL0077021	---
Sample Date	Client Info		12 May 2024	09 Aug 2023	---
Machine Age	kms	Client Info	6447	5470	---
Oil Age	kms	Client Info	1000	0	---
Oil Changed	Client Info		Changed	Changed	---
Sample Status			NORMAL	ABNORMAL	---

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	1.6	---
Water	WC Method	>0.2	NEG	NEG	---
Glycol	WC Method		NEG	0.0	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >100	36	37	---
Chromium	ppm	ASTM D5185(m) >20	2	2	---
Nickel	ppm	ASTM D5185(m) >2	0	<1	---
Titanium	ppm	ASTM D5185(m) >2	0	<1	---
Silver	ppm	ASTM D5185(m) >2	0	0	---
Aluminum	ppm	ASTM D5185(m) >25	35	27	---
Lead	ppm	ASTM D5185(m) >40	<1	4	---
Copper	ppm	ASTM D5185(m) >330	33	170	---
Tin	ppm	ASTM D5185(m) >15	0	0	---
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	2	17	---
Barium	ppm	ASTM D5185(m) 0	0	0	---
Molybdenum	ppm	ASTM D5185(m) 60	62	57	---
Manganese	ppm	ASTM D5185(m) 0	<1	<1	---
Magnesium	ppm	ASTM D5185(m) 1010	857	546	---
Calcium	ppm	ASTM D5185(m) 1070	1145	1576	---
Phosphorus	ppm	ASTM D5185(m) 1150	808	854	---
Zinc	ppm	ASTM D5185(m) 1270	1086	1014	---
Sulfur	ppm	ASTM D5185(m) 2060	2408	2304	---
Lithium	ppm	ASTM D5185(m)	<1	<1	---

CONTAMINANTS

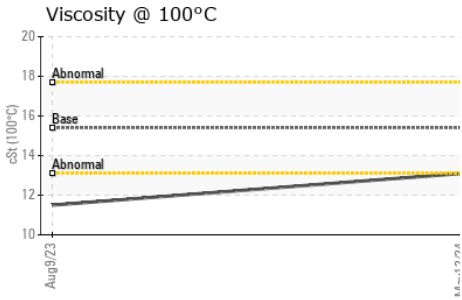
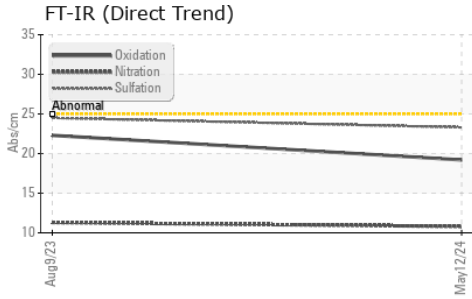
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	4	7	---
Sodium	ppm	ASTM D5185(m)	18	41	---
Potassium	ppm	ASTM D5185(m) >20	4	7	---

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >3	0.6	0.4	---
Nitration	Abs/cm	ASTM D7624* >20	10.8	11.3	---
Sulfation	Abs./1mm	ASTM D7415* >30	23.3	24.5	---



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FLUID DEGRADATION

Method	Limit/Base	Current	History1	History2
Oxidation	Abs./1mm ASTM D7414*	19.2	22.3	---

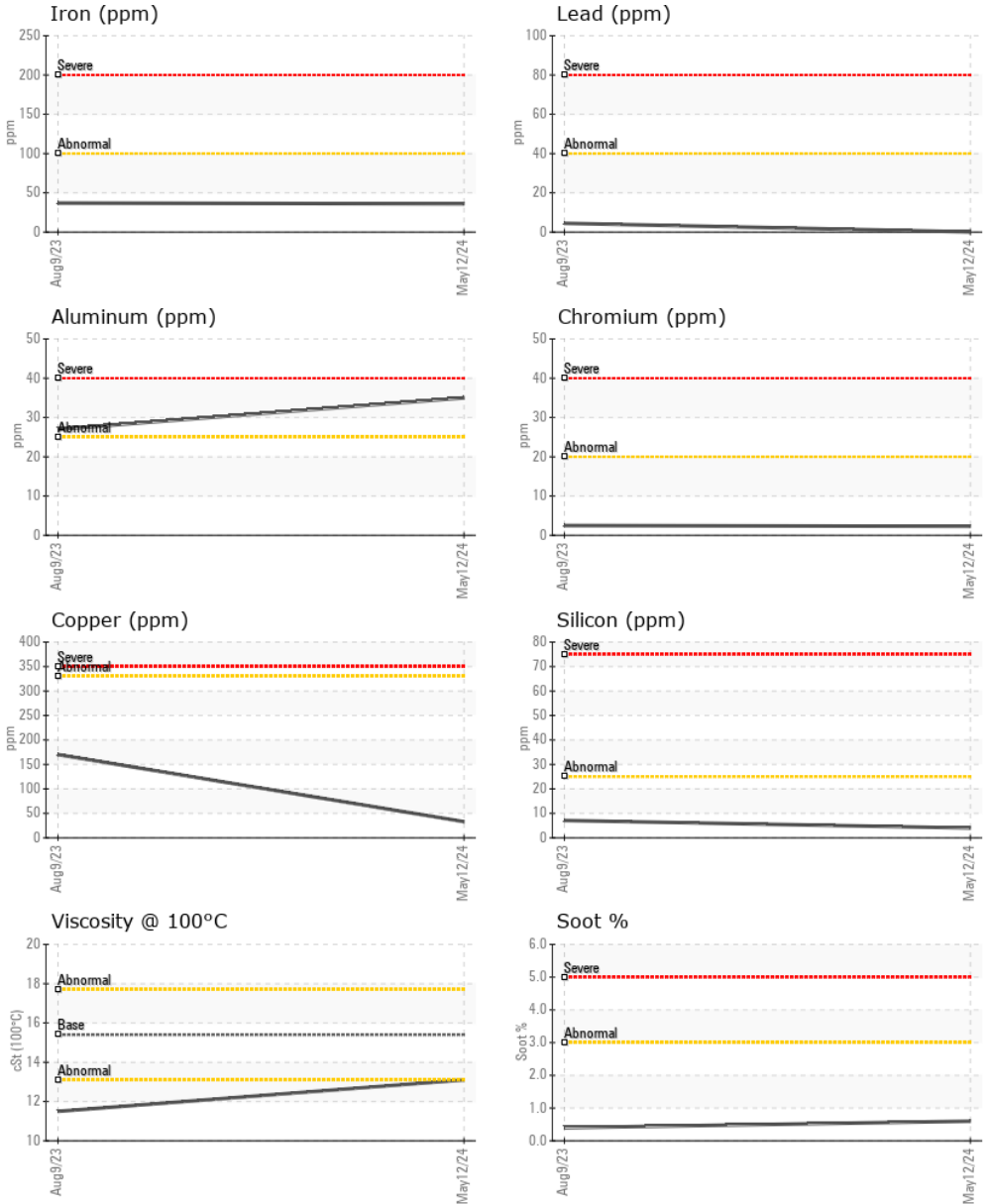
VISUAL

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

FLUID PROPERTIES

Method	Limit/Base	Current	History1	History2
Visc @ 100°C	cSt ASTM D7279(m)	13.1	▲ 11.5	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0100613
Lab Number : 02635243
Unique Number : 5776396
Test Package : MOB 1
Received : 14 May 2024
Tested : 14 May 2024
Diagnosed : 14 May 2024 - Wes Davis

GFL Environmental - 575 - Squamish Hauling
 38950 Queens Way,
 Squamish, BC
 CA V8B 0K8
 Contact: Jonas Araujo
 jaraujo@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.