



OIL ANALYSIS REPORT

Sample Rating Trend

FUEL



Machine Id
800019

Component
Diesel Engine

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



DIAGNOSIS

Recommendation

We advise that you check the fuel injection system. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. Please specify the component make and model with your next sample.

Wear

All component wear rates are normal.

Contamination

There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Fluid Condition

Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GFL0102683	---	---
Sample Date	Client Info		20 Nov 2023	---	---
Machine Age	hrs	Client Info	13662	---	---
Oil Age	hrs	Client Info	0	---	---
Oil Changed	Client Info		N/A	---	---
Sample Status			SEVERE	---	---

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	NEG	---	---
Glycol	WC Method		NEG	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >100	37	---	---
Chromium	ppm	ASTM D5185(m) >20	2	---	---
Nickel	ppm	ASTM D5185(m) >4	<1	---	---
Titanium	ppm	ASTM D5185(m)	0	---	---
Silver	ppm	ASTM D5185(m) >3	<1	---	---
Aluminum	ppm	ASTM D5185(m) >20	3	---	---
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	2	---	---
Barium	ppm	ASTM D5185(m) 0	<1	---	---
Molybdenum	ppm	ASTM D5185(m) 60	46	---	---
Manganese	ppm	ASTM D5185(m) 0	0	---	---
Magnesium	ppm	ASTM D5185(m) 1010	755	---	---
Calcium	ppm	ASTM D5185(m) 1070	849	---	---
Phosphorus	ppm	ASTM D5185(m) 1150	794	---	---
Zinc	ppm	ASTM D5185(m) 1270	951	---	---
Sulfur	ppm	ASTM D5185(m) 2060	1883	---	---
Lithium	ppm	ASTM D5185(m)	<1	---	---

CONTAMINANTS

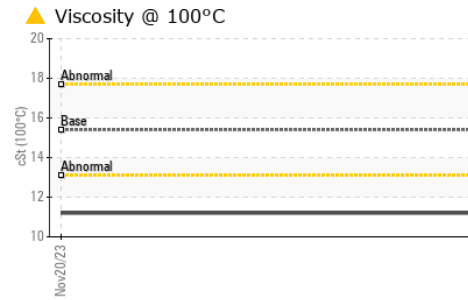
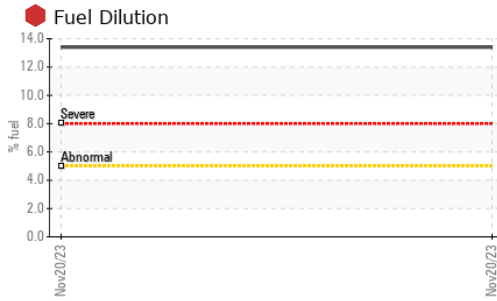
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	5	---	---
Sodium	ppm	ASTM D5185(m)	51	---	---
Potassium	ppm	ASTM D5185(m) >20	5	---	---
Fuel	%	ASTM D7593* >5	13.4	---	---

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >3	0.6	---	---
Nitration	Abs/cm	ASTM D7624* >20	16.9	---	---
Sulfation	Abs./1mm	ASTM D7415* >30	34.2	---	---



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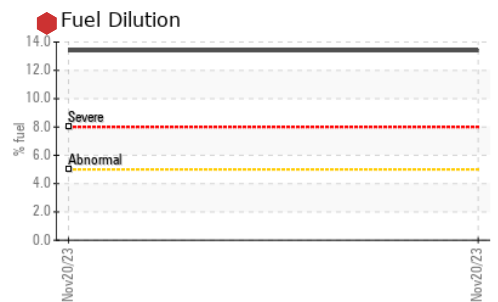
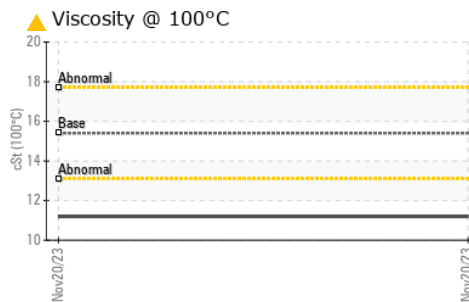
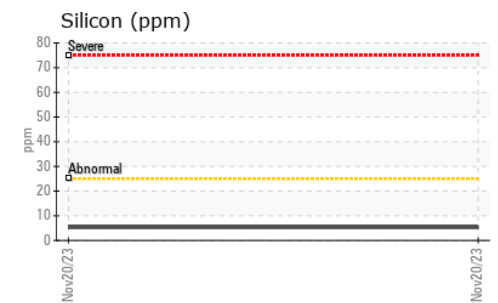
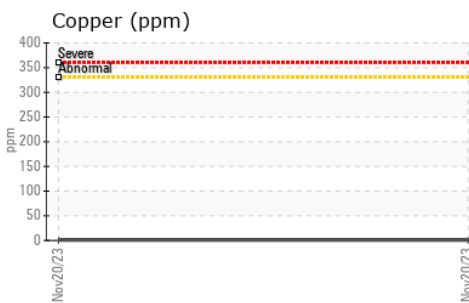
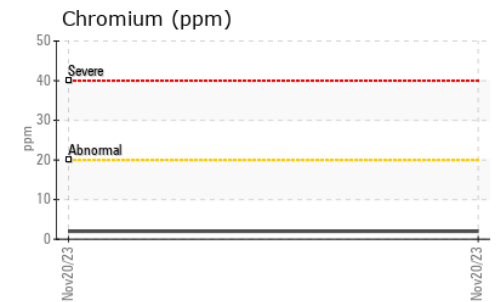
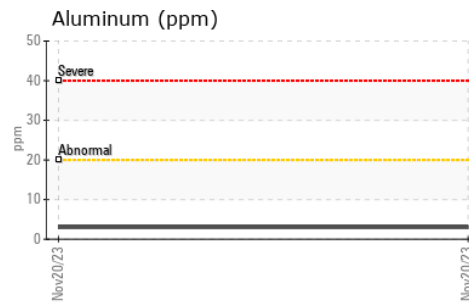
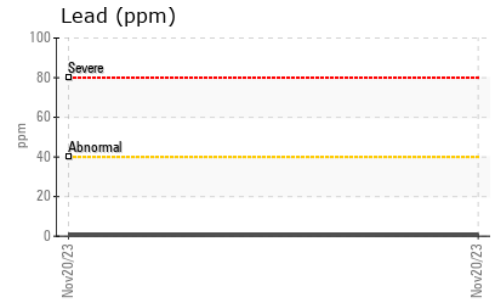
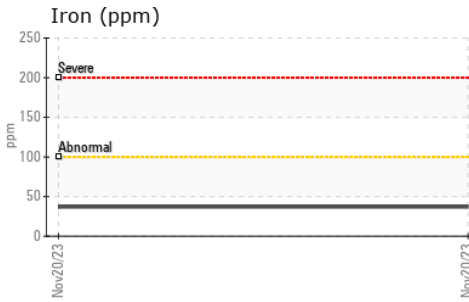


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	47.2	---	---

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	▲ 11.2	---	---

GRAPHS



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 207 - Pickering SW**
Sample No. : GFL0102683 **Received** : 22 Nov 2023 **1034 TOY AVENUE, PICKERING YARD**
Lab Number : 02598121 **Diagnosed** : 23 Nov 2023 **PICKERING, ON**
Unique Number : 5683201 **Diagnostician** : Kevin Marson **CA L1W 3P1**
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel) **Contact: Ian Patton**

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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