



OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
FREIGHTLINER 422049
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)



DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor.

Wear

Metal levels are typical for a components first oil change.

Contamination

Fuel content negligible. 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		GFL0096334	---	---
Sample Date	Client Info		02 Nov 2023	---	---
Machine Age	hrs	Client Info	600	---	---
Oil Age	hrs	Client Info	600	---	---
Oil Changed	Client Info		Changed	---	---
Sample Status			NORMAL	---	---

CONTAMINATION

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

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>80	77	---	---
Chromium	ppm	ASTM D5185(m)	>5	5	---	---
Nickel	ppm	ASTM D5185(m)	>2	<1	---	---
Titanium	ppm	ASTM D5185(m)		0	---	---
Silver	ppm	ASTM D5185(m)	>3	<1	---	---
Aluminum	ppm	ASTM D5185(m)	>30	38	---	---
Lead	ppm	ASTM D5185(m)	>30	3	---	---
Copper	ppm	ASTM D5185(m)	>150	29	---	---
Tin	ppm	ASTM D5185(m)	>5	<1	---	---
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	3	---	---
Barium	ppm	ASTM D5185(m)	0	<1	---	---
Molybdenum	ppm	ASTM D5185(m)	60	22	---	---
Manganese	ppm	ASTM D5185(m)	0	1	---	---
Magnesium	ppm	ASTM D5185(m)	1010	230	---	---
Calcium	ppm	ASTM D5185(m)	1070	1657	---	---
Phosphorus	ppm	ASTM D5185(m)	1150	801	---	---
Zinc	ppm	ASTM D5185(m)	1270	969	---	---
Sulfur	ppm	ASTM D5185(m)	2060	2287	---	---
Lithium	ppm	ASTM D5185(m)		<1	---	---

CONTAMINANTS

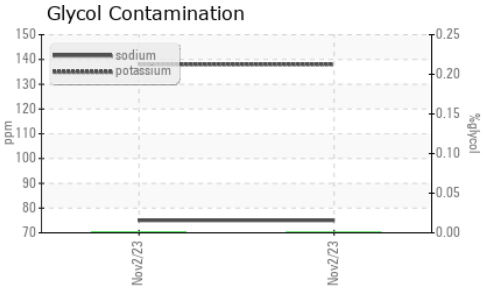
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>20	16	---	---
Sodium	ppm	ASTM D5185(m)		75	---	---
Potassium	ppm	ASTM D5185(m)	>20	138	---	---
Fuel	%	ASTM D7593*	>5	0.5	---	---
Glycol	%	ASTM D7922*		0.0	---	---

INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	1.2	---	---
Nitration	Abs/cm	ASTM D7624*	>20	9.8	---	---
Sulfation	Abs/1mm	ASTM D7415*	>30	23.7	---	---



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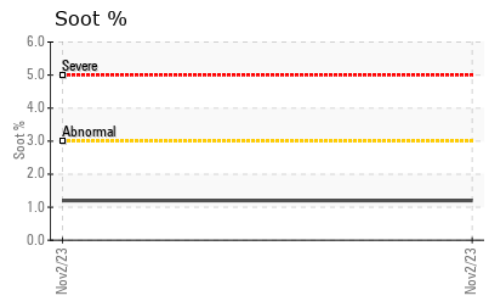
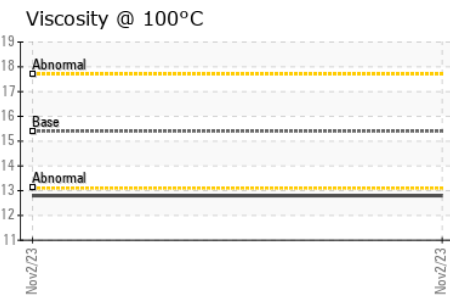
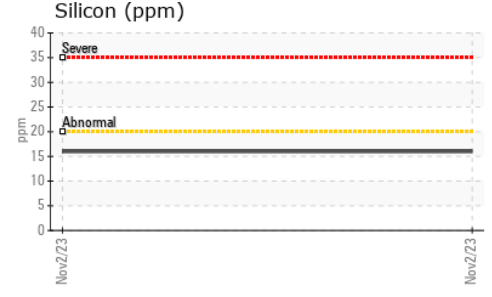
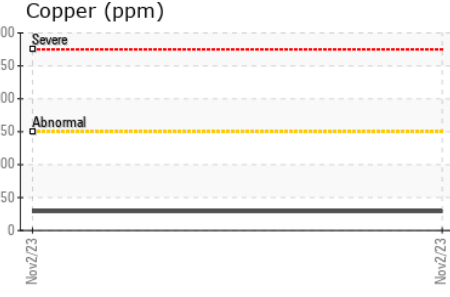
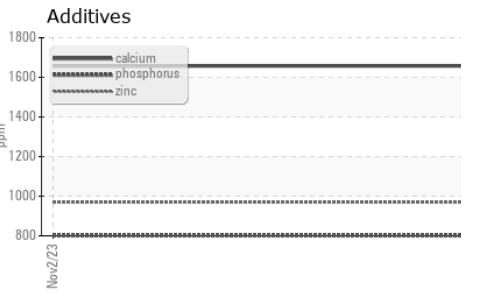
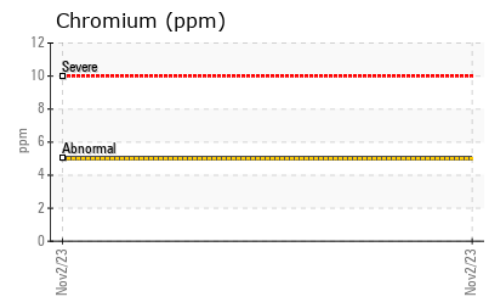
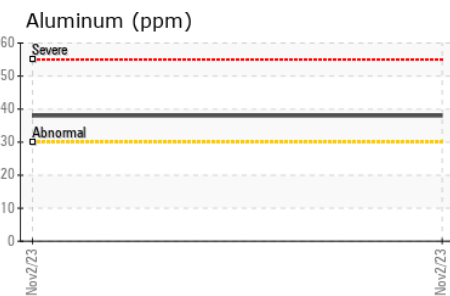
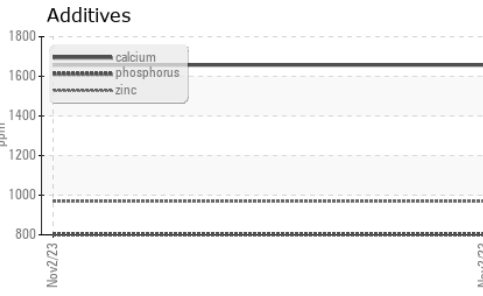
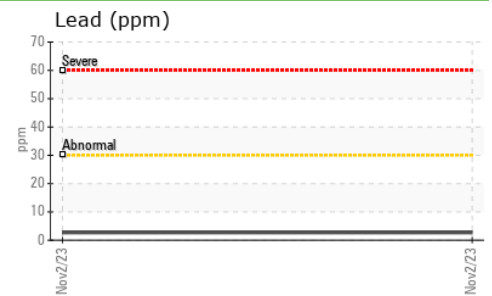
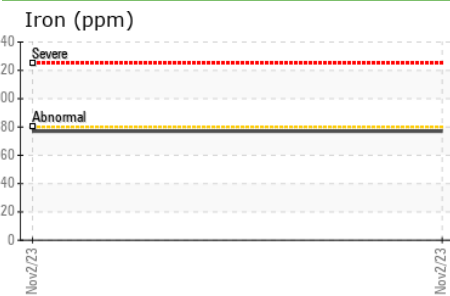
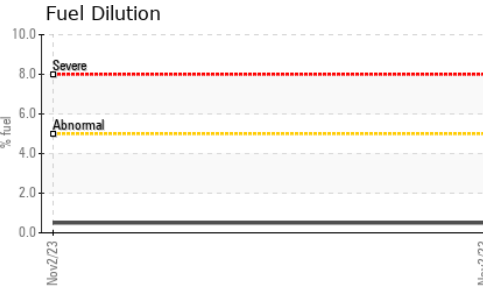


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	15.5	---	---

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	12.8	---	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0096334 **Received** : 13 Dec 2023
Lab Number : 02602766 **Diagnosed** : 14 Dec 2023
Unique Number : 5695851 **Diagnostician** : Kevin Marson
Test Package : MOB 1 (Additional Tests: FuelDilution, Glycol, PercentFuel)

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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