



OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Machine Id
351044

Component
Diesel Engine

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

DIAGNOSIS

Recommendation

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time.

Wear

All component wear rates are normal.

Contamination

Light fuel dilution occurring. No other contaminants were detected in the oil.

Fluid Condition

Viscosity of sample indicates oil is within SAE 10W30 range, advise investigate. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0090753	---	---
Sample Date	Client Info	11 Mar 2024	---	---
Machine Age	hrs	Client Info	138131	---
Oil Age	hrs	Client Info	7500	---
Oil Changed	Client Info	Changed	---	---
Sample Status		ABNORMAL	---	---

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)	>100	41	---
Chromium	ppm	ASTM D5185(m)	>20	<1	---
Nickel	ppm	ASTM D5185(m)	>4	<1	---
Titanium	ppm	ASTM D5185(m)		0	---
Silver	ppm	ASTM D5185(m)	>3	0	---
Aluminum	ppm	ASTM D5185(m)	>20	7	---
Lead	ppm	ASTM D5185(m)	>40	0	---
Copper	ppm	ASTM D5185(m)	>330	2	---
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	11	---
Barium	ppm	ASTM D5185(m)	0	0	---
Molybdenum	ppm	ASTM D5185(m)	60	59	---
Manganese	ppm	ASTM D5185(m)	0	<1	---
Magnesium	ppm	ASTM D5185(m)	1010	923	---
Calcium	ppm	ASTM D5185(m)	1070	1036	---
Phosphorus	ppm	ASTM D5185(m)	1150	983	---
Zinc	ppm	ASTM D5185(m)	1270	1155	---
Sulfur	ppm	ASTM D5185(m)	2060	2501	---
Lithium	ppm	ASTM D5185(m)		<1	---

CONTAMINANTS

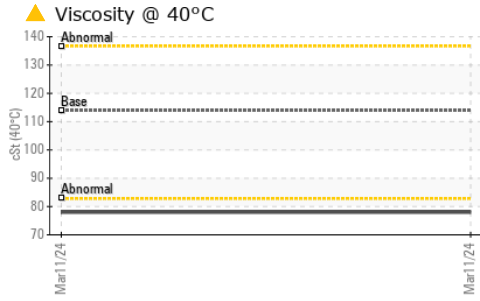
method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	5	---
Sodium	ppm	ASTM D5185(m)		2	---
Potassium	ppm	ASTM D5185(m)	>20	5	---
Fuel	%	ASTM D7593*	>5	▲ 3	---
Glycol	%	ASTM D7922*		0.0	---

INFRA-RED

method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	0.4	---
Nitration	Abs/cm	ASTM D7624*	>20	13.6	---
Sulfation	Abs./1mm	ASTM D7415*	>30	26.0	---



OIL ANALYSIS REPORT

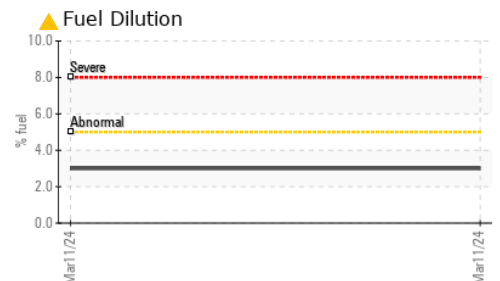
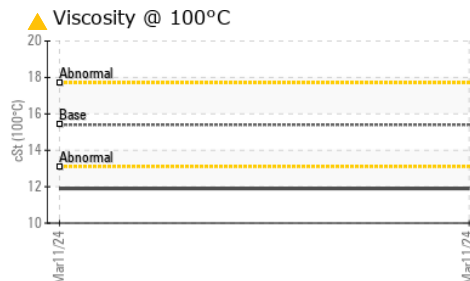
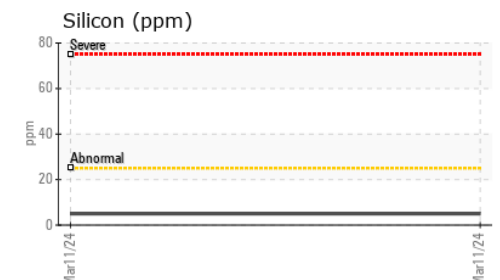
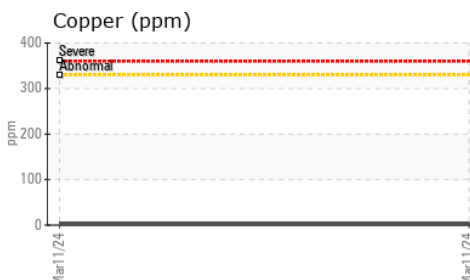
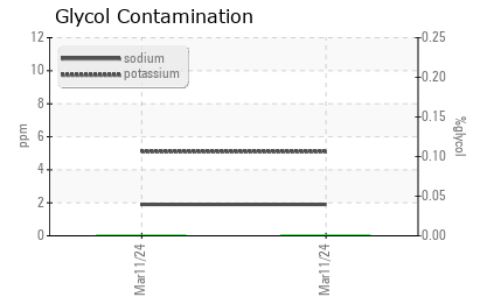
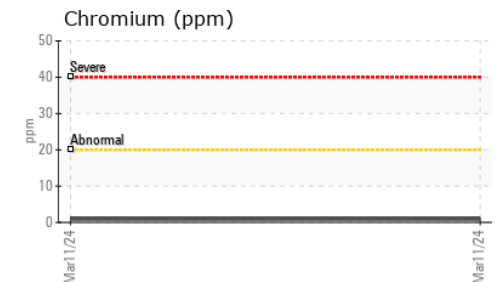
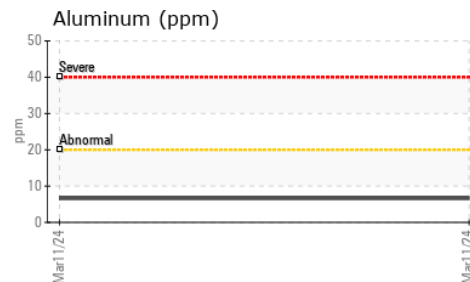
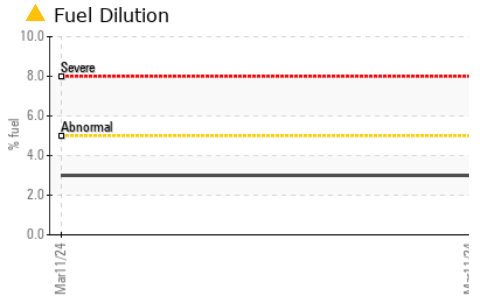
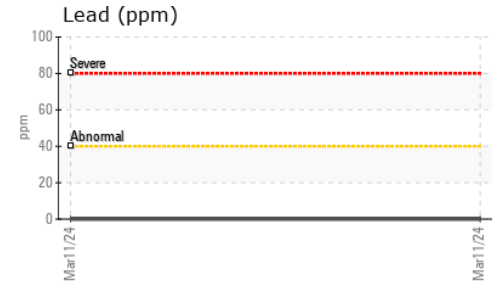
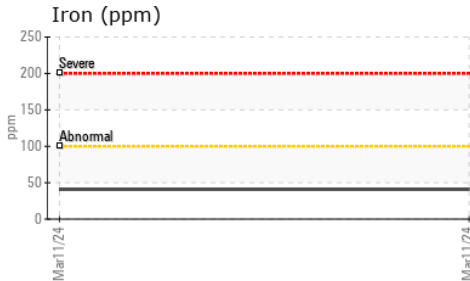
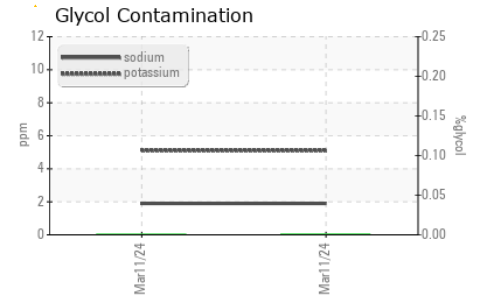


FLUID DEGRADATION	method	limit/base	current	history1	history2	
Oxidation	Abs./1mm	ASTM D7414*	>25	30.9	---	---

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 @ 40°C	cSt	ASTM D7279(m)	113.9	▲ 78.0	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	▲ 11.9	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	142	147	---	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0090753
Lab Number : 02622970
Unique Number : 5748089
Test Package : MOB 1 (Additional Tests: FuelDilution, Glycol, KV40, PercentFuel, VI)

GFL Environmental - 504 - Edmonton
 12015 28 Street NE
 Edmonton, AB
 CA T6S 1E2
 Contact: Jerrod Adair
 jerrodadair@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.*

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