



OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Machine Id

8213

Component

Diesel Engine

Fluid

PETRO CANADA DURON SHP 15W40 (28 LTR)

DIAGNOSIS

Recommendation

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

There is a moderate 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		GFL0099518	---	---
Sample Date	Client Info		21 Feb 2024	---	---
Machine Age	hrs	Client Info	12223	---	---
Oil Age	hrs	Client Info	400	---	---
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	14	---
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	2	---
Lead	ppm	ASTM D5185(m)	>40	<1	---
Copper	ppm	ASTM D5185(m)	>330	3	---
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	4	---
Barium	ppm	ASTM D5185(m)	0	0	---
Molybdenum	ppm	ASTM D5185(m)	60	62	---
Manganese	ppm	ASTM D5185(m)	0	1	---
Magnesium	ppm	ASTM D5185(m)	1010	942	---
Calcium	ppm	ASTM D5185(m)	1070	1029	---
Phosphorus	ppm	ASTM D5185(m)	1150	1016	---
Zinc	ppm	ASTM D5185(m)	1270	1141	---
Sulfur	ppm	ASTM D5185(m)	2060	2760	---
Lithium	ppm	ASTM D5185(m)		<1	---

CONTAMINANTS

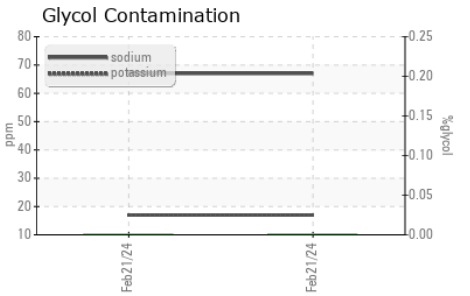
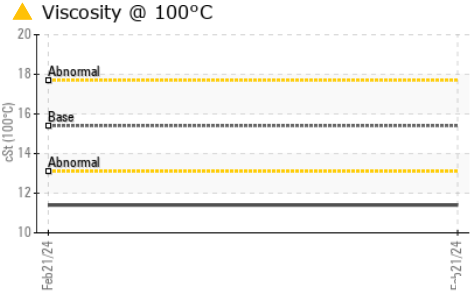
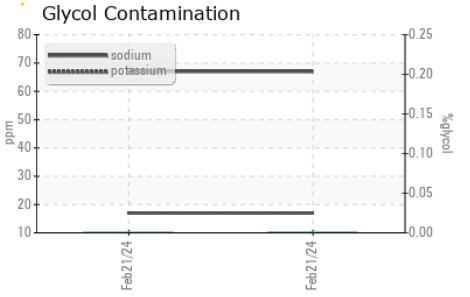
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	4	---
Sodium	ppm	ASTM D5185(m)		67	---
Potassium	ppm	ASTM D5185(m)	>20	17	---
Fuel	%	ASTM D7593*	>2.0	▲ 4.3	---
Glycol	%	ASTM D7922*		0.0	---

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0	---
Nitration	Abs/cm	ASTM D7624*	>20	6.3	---
Sulfation	Abs./1mm	ASTM D7415*	>30	18.5	---



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FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs./1mm ASTM D7414*	>25	15.2	---

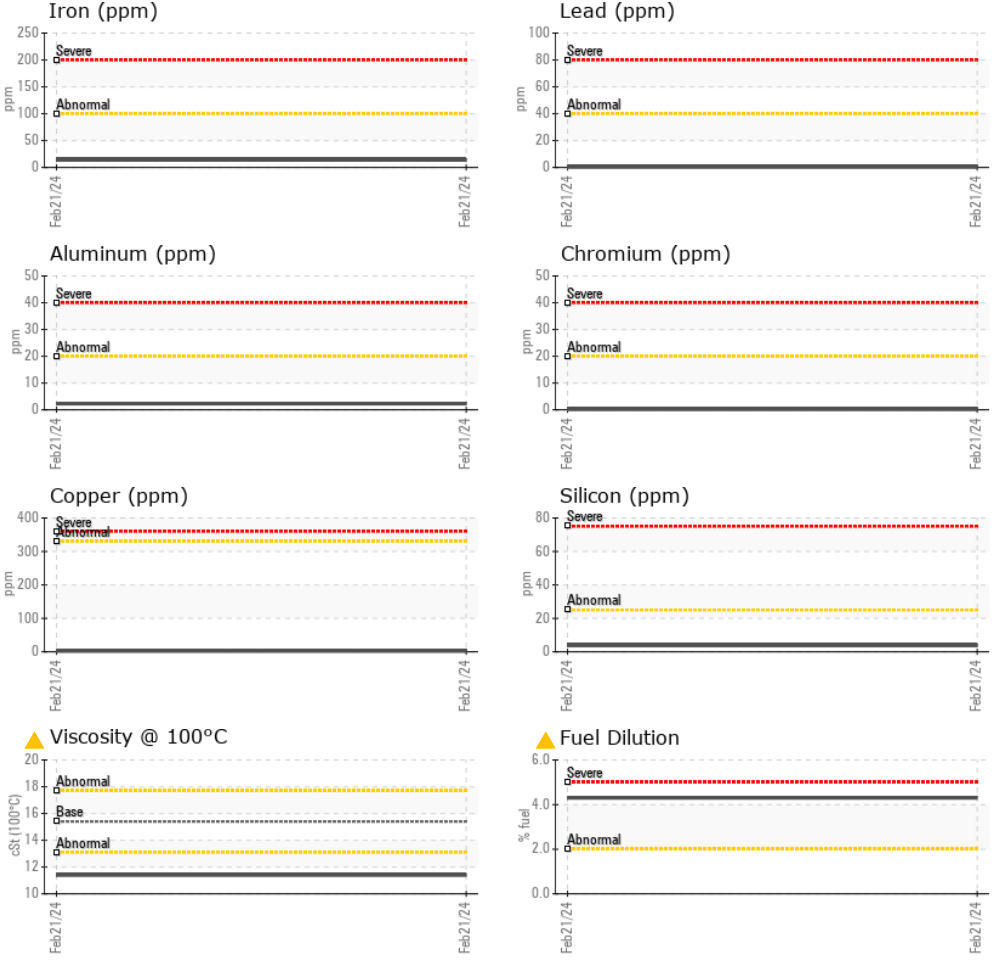
VISUAL

method	limit/base	current	history1	history2
White Metal	scalar Visual*	NONE	NONE	---
Yellow Metal	scalar Visual*	NONE	NONE	---
Precipitate	scalar Visual*	NONE	NONE	---
Silt	scalar Visual*	NONE	NONE	---
Debris	scalar Visual*	NONE	NONE	---
Sand/Dirt	scalar Visual*	NONE	NONE	---
Appearance	scalar Visual*	NORML	NORML	---
Odor	scalar Visual*	NORML	NORML	---
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	▲ 11.4	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0099518 **Received** : 11 Mar 2024
Lab Number : 02621041 **Tested** : 12 Mar 2024
Unique Number : 5746160 **Diagnosed** : 12 Mar 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: FuelDilution, Glycol, PercentFuel, Visual)

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.

GFL Environmental - 522
 175 MacAlpine Crescent
 Fort McMurray, AB
 CA T9H 4A5
 Contact: Brad Poole
 bradley.poole@gflenv.com

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F: