



OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id

721071

Component

Diesel Engine

Fluid

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

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

Piston, ring and cylinder wear is indicated.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the 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		GFL0111918	---	---
Sample Date	Client Info		17 May 2024	---	---
Machine Age	mls	Client Info	192180	---	---
Oil Age	mls	Client Info	0	---	---
Oil Changed	Client Info		Changed	---	---
Sample Status			ABNORMAL	---	---

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>2.0	<1.0	---	---
Water	WC Method	>0.2	NEG	---	---
Glycol	WC Method		NEG	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	▲ 122	---	---
Chromium	ppm	ASTM D5185m >20	2	---	---
Nickel	ppm	ASTM D5185m >4	0	---	---
Titanium	ppm	ASTM D5185m	0	---	---
Silver	ppm	ASTM D5185m >3	0	---	---
Aluminum	ppm	ASTM D5185m >20	▲ 22	---	---
Lead	ppm	ASTM D5185m >40	1	---	---
Copper	ppm	ASTM D5185m >330	5	---	---
Tin	ppm	ASTM D5185m >15	0	---	---
Vanadium	ppm	ASTM D5185m	0	---	---
Cadmium	ppm	ASTM D5185m	0	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	0	---	---
Barium	ppm	ASTM D5185m 0	0	---	---
Molybdenum	ppm	ASTM D5185m 60	75	---	---
Manganese	ppm	ASTM D5185m 0	<1	---	---
Magnesium	ppm	ASTM D5185m 1010	1239	---	---
Calcium	ppm	ASTM D5185m 1070	1496	---	---
Phosphorus	ppm	ASTM D5185m 1150	1343	---	---
Zinc	ppm	ASTM D5185m 1270	1537	---	---
Sulfur	ppm	ASTM D5185m 2060	3819	---	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	10	---	---
Sodium	ppm	ASTM D5185m	34	---	---
Potassium	ppm	ASTM D5185m >20	13	---	---

INFRA-RED

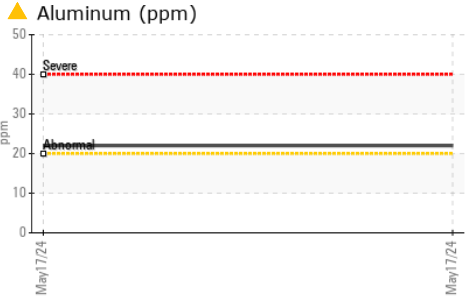
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	1	---	---
Nitration	Abs/cm	*ASTM D7624 >20	9.8	---	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	23.9	---	---

FLUID DEGRADATION

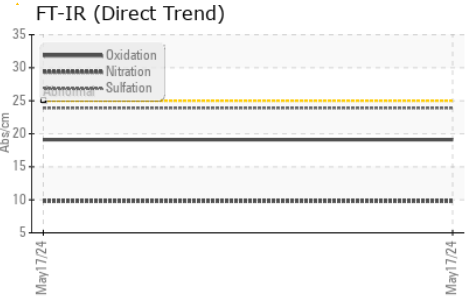
	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	19.1	---	---
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	9.5	---	---



OIL ANALYSIS REPORT

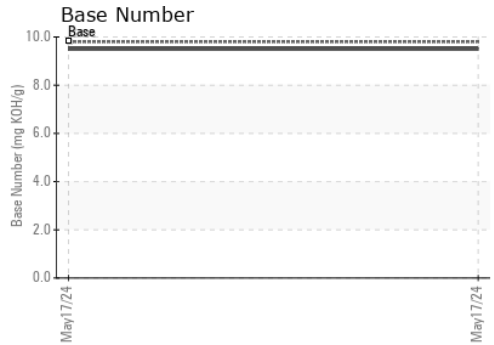
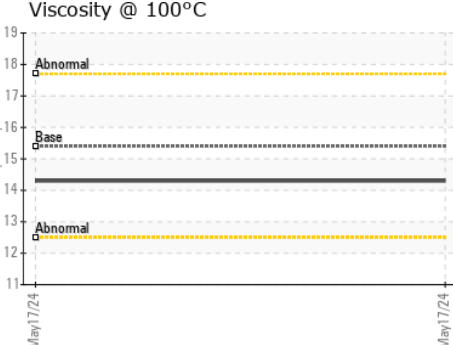
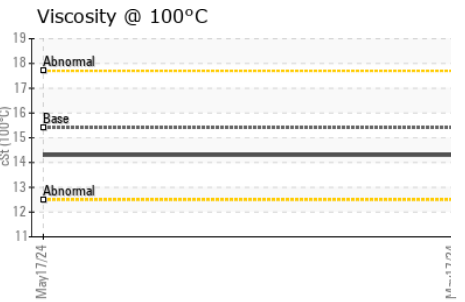
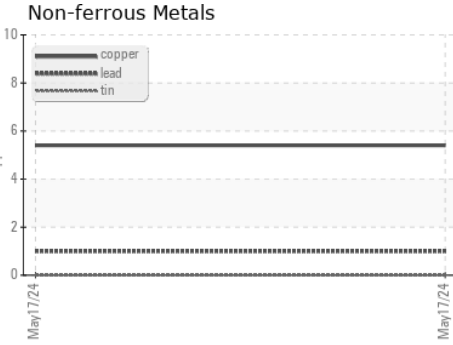
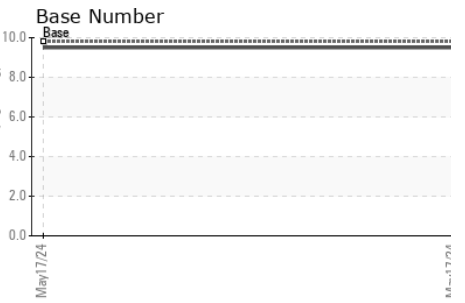
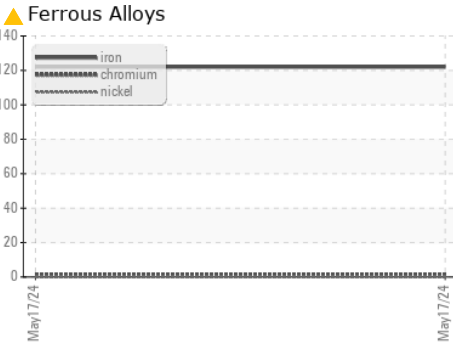
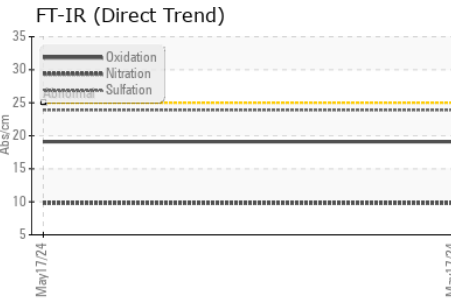


VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Precipitate	scalar	*Visual	NONE	NONE	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
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 D445	15.4	14.3	---	---

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0111918
Lab Number : 06197238
Unique Number : 11059361
Test Package : FLEET

GFL Environmental - 959D - PARK - Decatur
 1788 E Hubbard
 Decatur, IL
 US 62526
 Contact: Larry Siegmann
 lsiegmann@gflenv.com

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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F: