



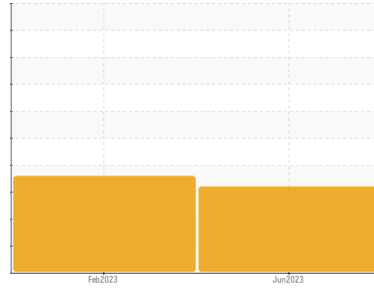
PROBLEM SUMMARY

Sample Rating Trend

DIRT

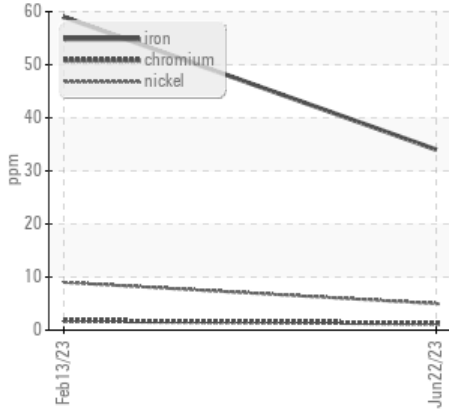


Machine Id
RENT403
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

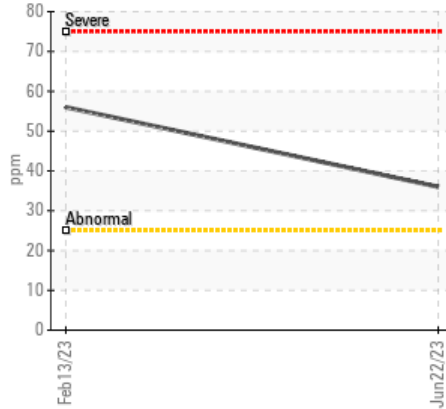


COMPONENT CONDITION SUMMARY

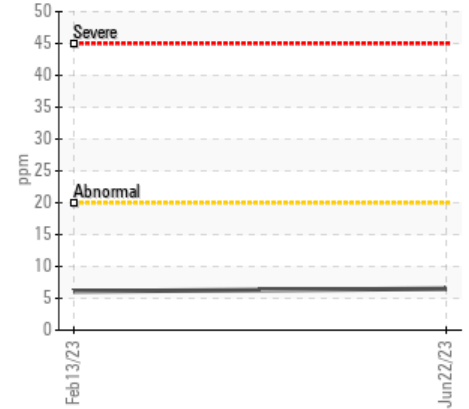
▲ Ferrous Alloys



▲ Silicon (ppm)



▲ Aluminum (ppm)



RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ABNORMAL	---
Nickel	ppm	ASTM D5185m	>5	▲ 5	▲ 9	---
Aluminum	ppm	ASTM D5185m	>20	▲ 6	▲ 6	---
Silicon	ppm	ASTM D5185m	>25	▲ 36	▲ 56	---

Customer Id: GFL030
Sample No.: GFL0070768
Lab Number: 05885448
Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:
Don Baldrige +1
don.b505@comcast.net

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.
Check Dirt Access	---	---	?	We advise that you check the air filter, air induction system, and any areas where dirt may enter the component.

HISTORICAL DIAGNOSIS

13 Feb 2023 Diag: Jonathan Hester

DIRT



We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. Valve wear is indicated. Fuel content negligible. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

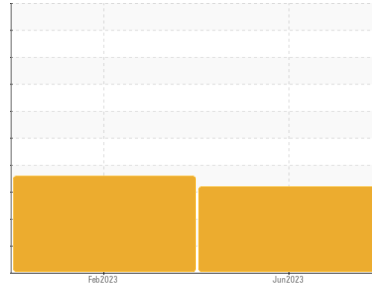
view report





OIL ANALYSIS REPORT

Sample Rating Trend



DIRT



Machine Id
RENT403
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

DIAGNOSIS

▲ Recommendation

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

▲ Wear

Valve wear is indicated. All other component wear rates are normal.

▲ Contamination

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

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	history 1	history 2
Sample Number	Client Info		GFL0070768	GFL0047431	---
Sample Date	Client Info		22 Jun 2023	13 Feb 2023	---
Machine Age	hrs	Client Info	2477	1428	---
Oil Age	hrs	Client Info	600	600	---
Oil Changed	Client Info		Changed	Changed	---
Sample Status			ABNORMAL	ABNORMAL	---

CONTAMINATION

	method	limit/base	current	history 1	history 2
Fuel	WC Method	>3.0	<1.0	0.3	---
Glycol	WC Method		NEG	NEG	---

WEAR METALS

	method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m >120	34	59	---
Chromium	ppm	ASTM D5185m >20	1	2	---
Nickel	ppm	ASTM D5185m >5	▲ 5	▲ 9	---
Titanium	ppm	ASTM D5185m >2	<1	<1	---
Silver	ppm	ASTM D5185m >2	<1	<1	---
Aluminum	ppm	ASTM D5185m >20	▲ 6	▲ 6	---
Lead	ppm	ASTM D5185m >40	3	2	---
Copper	ppm	ASTM D5185m >330	23	37	---
Tin	ppm	ASTM D5185m >15	3	5	---
Vanadium	ppm	ASTM D5185m	<1	0	---
Cadmium	ppm	ASTM D5185m	0	0	---

ADDITIVES

	method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m 0	4	22	---
Barium	ppm	ASTM D5185m 0	0	<1	---
Molybdenum	ppm	ASTM D5185m 60	72	103	---
Manganese	ppm	ASTM D5185m 0	3	5	---
Magnesium	ppm	ASTM D5185m 1010	1047	749	---
Calcium	ppm	ASTM D5185m 1070	1215	1363	---
Phosphorus	ppm	ASTM D5185m 1150	1018	693	---
Zinc	ppm	ASTM D5185m 1270	1318	909	---
Sulfur	ppm	ASTM D5185m 2060	2754	2446	---

CONTAMINANTS

	method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m >25	▲ 36	▲ 56	---
Sodium	ppm	ASTM D5185m	4	4	---
Potassium	ppm	ASTM D5185m >20	4	5	---

INFRA-RED

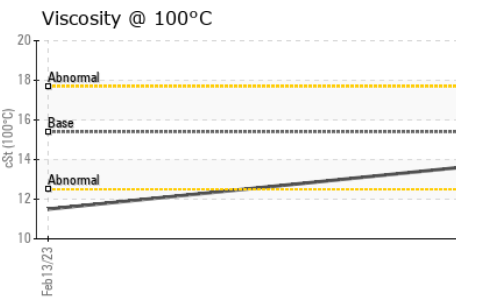
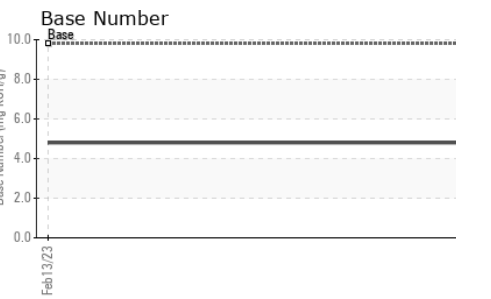
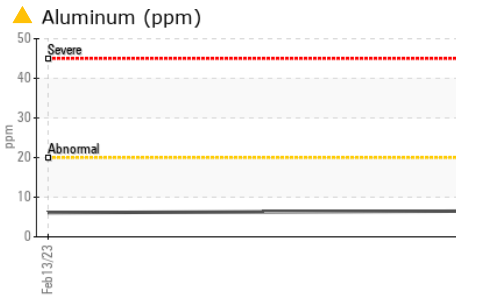
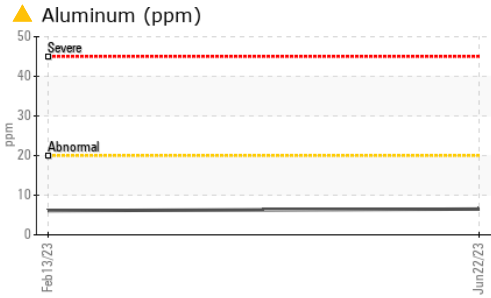
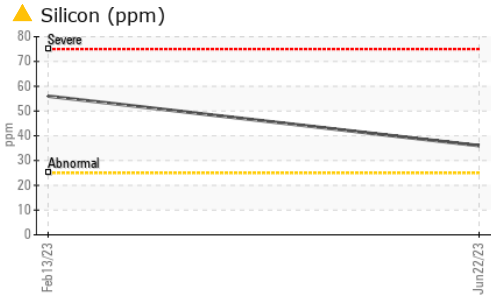
	method	limit/base	current	history 1	history 2
Soot %	%	*ASTM D7844 >4	0.9	0.9	---
Nitration	Abs/cm	*ASTM D7624 >20	10.8	13.2	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	23.1	25.0	---

FLUID DEGRADATION

	method	limit/base	current	history 1	history 2
Oxidation	Abs/.1mm	*ASTM D7414 >25	21.2	26.0	---
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	4.8	4.8	---



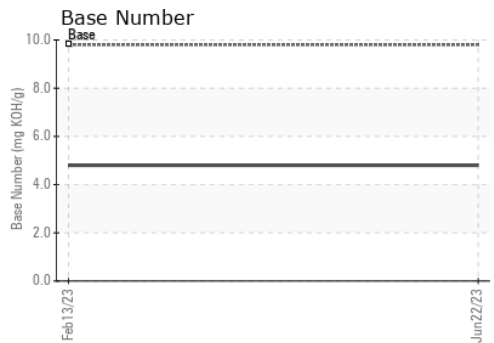
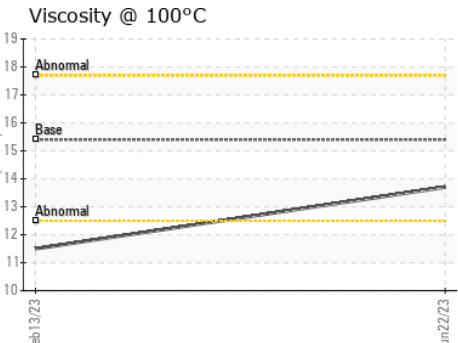
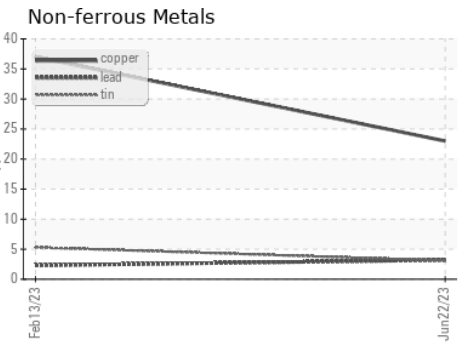
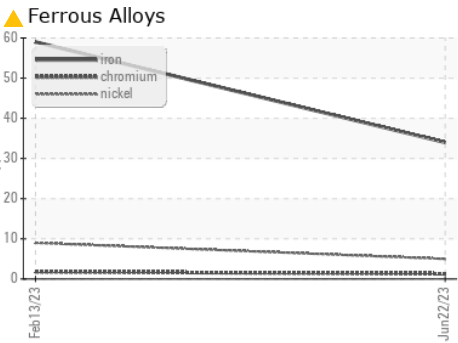
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history 1	history 2
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	history 1	history 2
Visc @ 100°C	cSt	ASTM D445	15.4	13.7	▲ 11.5

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0070768 **Received** : 28 Jun 2023
Lab Number : 05885448 **Diagnosed** : 30 Jun 2023
Unique Number : 10535931 **Diagnostician** : Don Baldrige
Test Package : FLEET

GFL Environmental - 030 - Conway Myrtle Beach
 3010 HWY 378
 Conway, SC
 US 29527
 Contact: CHET STROSCHINE
 cstroschine@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: