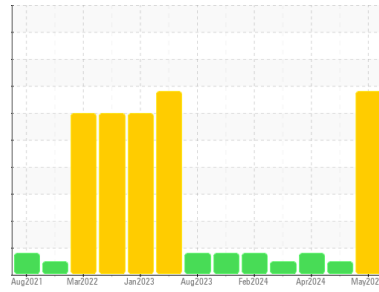




PROBLEM SUMMARY

Sample Rating Trend



WEAR

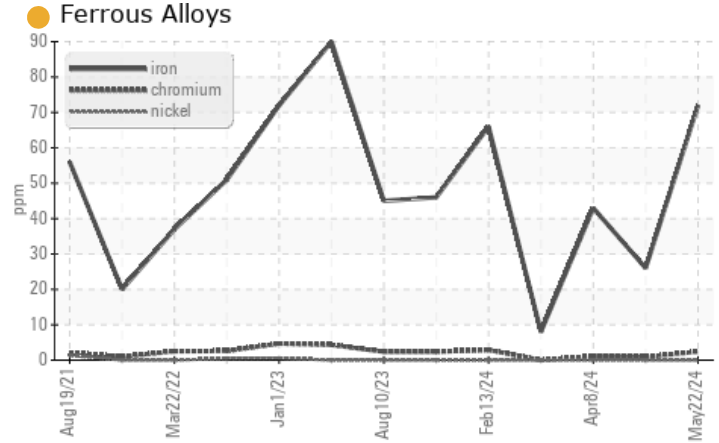
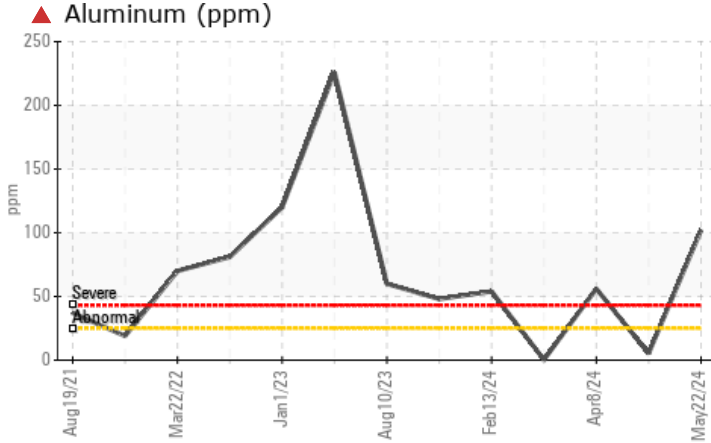


Machine Id
420023-402284

Component
Diesel Engine

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

COMPONENT CONDITION SUMMARY



RECOMMENDATION

Oil and filter change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	NORMAL	ABNORMAL
Aluminum	ppm	ASTM D5185m	>25	▲ 102	5	▲ 56

Customer Id: GFL822
Sample No.: GFL0118246
Lab Number: 06193513
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
Inspect Wear Source	---	---	?	We advise that you inspect for the source(s) of wear.
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.
Resample	---	---	?	We recommend an early resample to monitor this condition.

HISTORICAL DIAGNOSIS

NORMAL



26 Apr 2024 Diag: Wes Davis

Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report



WEAR



08 Apr 2024 Diag: Jonathan Hester

No corrective action is recommended at this time. Resample at the next service interval to monitor. The aluminum level is abnormal. All other component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report



NORMAL



13 Mar 2024 Diag: Wes Davis

Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

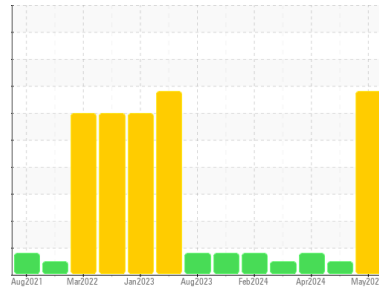
view report





OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id
420023-402284

Component
Diesel Engine

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

DIAGNOSIS

▲ Recommendation

Oil and filter change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

▲ Wear

A sharp increase in the aluminum level is noted. 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.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0118246	GFL0118238	GFL0118174
Sample Date	Client Info	22 May 2024	26 Apr 2024	08 Apr 2024
Machine Age	hrs	25311	25175	25026
Oil Age	hrs	600	700	300
Oil Changed	Client Info	Changed	Not Changd	Not Changd
Sample Status		SEVERE	NORMAL	ABNORMAL

CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >5	<1.0	<1.0	<1.0
Water	WC Method >0.2	NEG	NEG	NEG
Glycol	WC Method	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >110	72	26	43
Chromium	ppm ASTM D5185m >4	2	<1	1
Nickel	ppm ASTM D5185m >2	0	0	0
Titanium	ppm ASTM D5185m	0	0	0
Silver	ppm ASTM D5185m >2	0	0	0
Aluminum	ppm ASTM D5185m >25	102	5	56
Lead	ppm ASTM D5185m >45	<1	0	0
Copper	ppm ASTM D5185m >85	2	2	2
Tin	ppm ASTM D5185m >4	0	<1	<1
Vanadium	ppm ASTM D5185m	<1	0	0
Cadmium	ppm ASTM D5185m	0	0	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 0	0	1	0
Barium	ppm ASTM D5185m 0	0	0	0
Molybdenum	ppm ASTM D5185m 60	58	57	58
Manganese	ppm ASTM D5185m 0	2	<1	2
Magnesium	ppm ASTM D5185m 1010	943	885	929
Calcium	ppm ASTM D5185m 1070	1120	1014	1052
Phosphorus	ppm ASTM D5185m 1150	1038	1050	1042
Zinc	ppm ASTM D5185m 1270	1255	1190	1218
Sulfur	ppm ASTM D5185m 2060	3559	3285	3304

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >30	10	3	10
Sodium	ppm ASTM D5185m	3	15	1
Potassium	ppm ASTM D5185m >20	<1	10	0

INFRA-RED

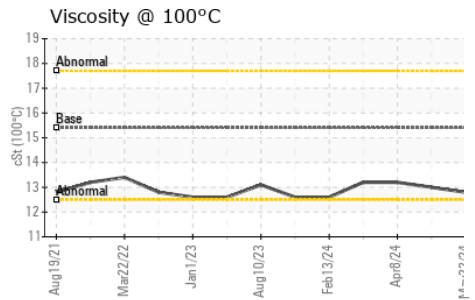
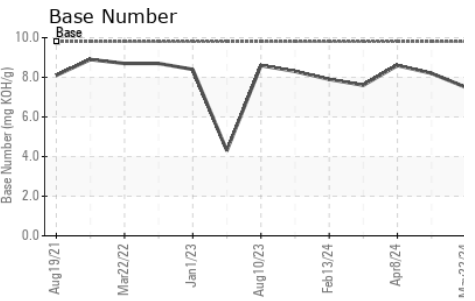
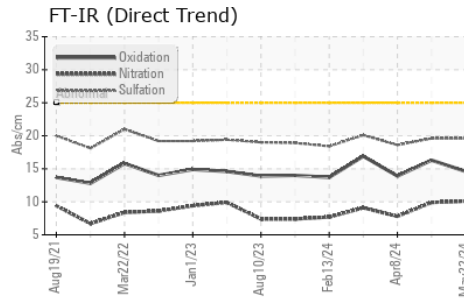
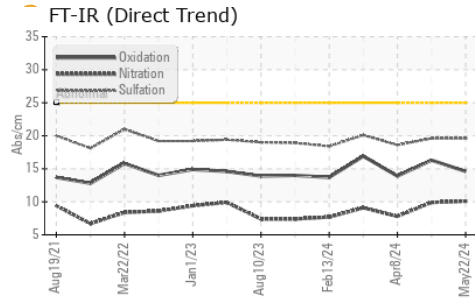
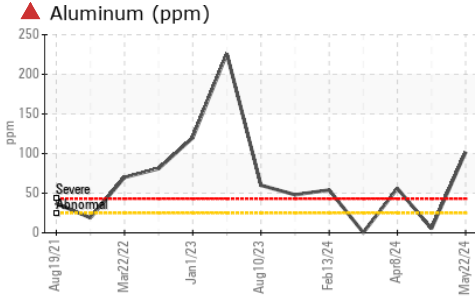
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	1.5	1	0.9
Nitration	Abs/cm *ASTM D7624 >20	10.1	9.9	7.8
Sulfation	Abs.1mm *ASTM D7415 >30	19.6	19.6	18.6

FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs.1mm *ASTM D7414 >25	14.6	16.3	13.9
Base Number (BN)	mg KOH/g ASTM D2896 9.8	7.5	8.2	8.6



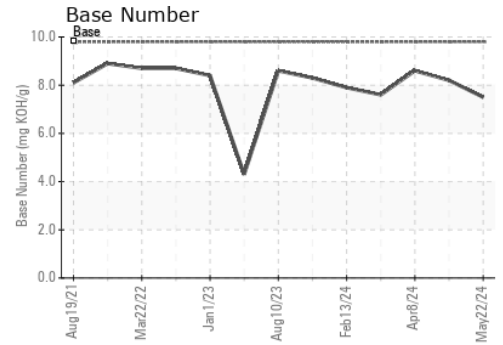
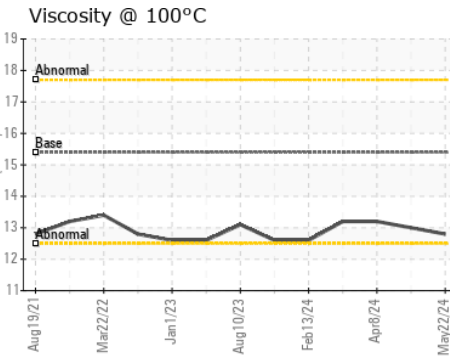
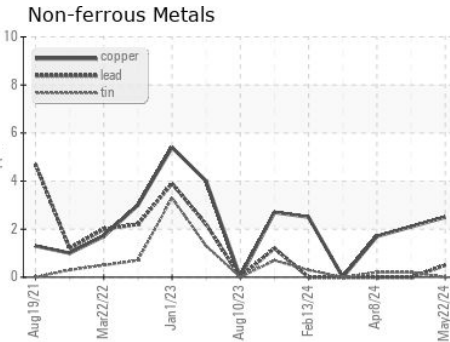
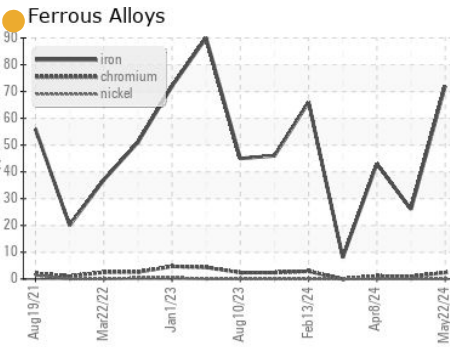
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	12.8	13.0

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : GFL0118246
 Lab Number : 06193513
 Unique Number : 11050265
 Test Package : FLEET

Received : 29 May 2024
 Tested : 30 May 2024
 Diagnosed : 31 May 2024 - Don Baldrige

GFL Environmental - 822 - Springfield Hauling
 2120 West Bennett Street
 Springfield, MO
 US 65807

Contact: Dennis Moore
 dennis.moore@gflenv.com
 T: (417)403-3641

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)

F: