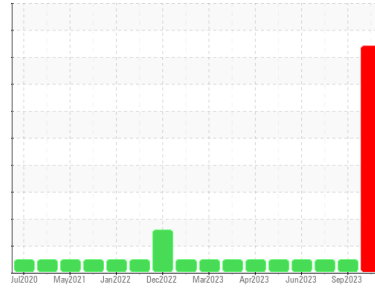




PROBLEM SUMMARY

Sample Rating Trend



WEAR



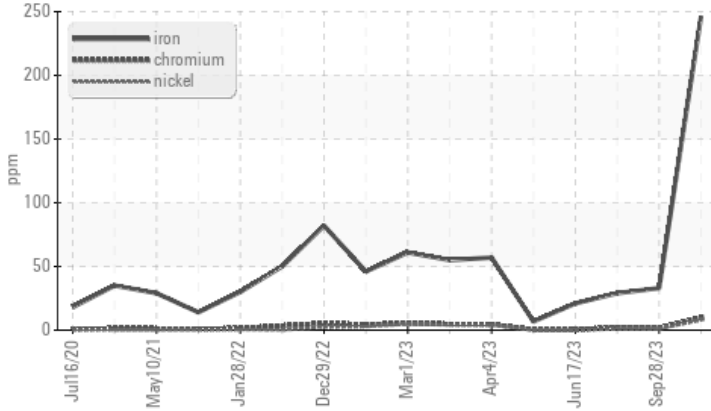
Machine Id
724002

Component
Diesel Engine

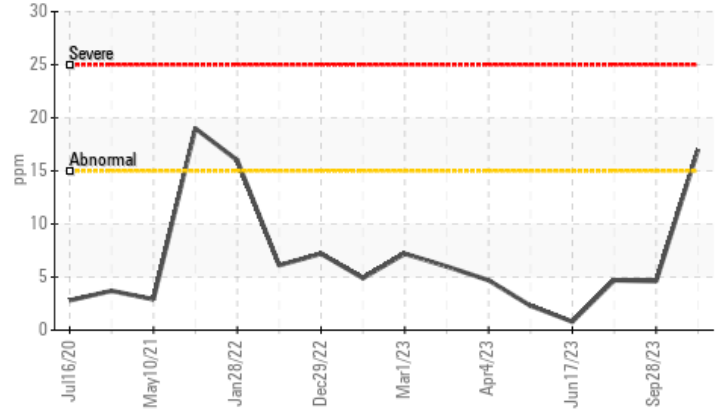
Fluid
PETRO CANADA DURON SHP 15W40 (26 QTS)

COMPONENT CONDITION SUMMARY

Ferrous Alloys



Aluminum (ppm)



RECOMMENDATION

We recommend that you drain the oil from the component if this has not already been done. 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	NORMAL
Iron	ppm	ASTM D5185m >75	246	33	29
Chromium	ppm	ASTM D5185m >5	10	2	2
Nickel	ppm	ASTM D5185m >4	8	<1	<1
Aluminum	ppm	ASTM D5185m >15	17	5	5

Customer Id: GFL868
 Sample No.: GFL0103483
 Lab Number: 06025981
 Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Jonathan Hester +1 919-379-4092 x4092
jhester@wearcheckusa.com

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	---	---	?	We recommend that you drain the oil from the component if this has not already been done.
Resample	---	---	?	We recommend an early resample to monitor this condition.

HISTORICAL DIAGNOSIS

28 Sep 2023 Diag: Wes Davis

NORMAL



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



19 Jul 2023 Diag: Wes Davis

NORMAL



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



17 Jun 2023 Diag: Jonathan Hester

NORMAL



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.

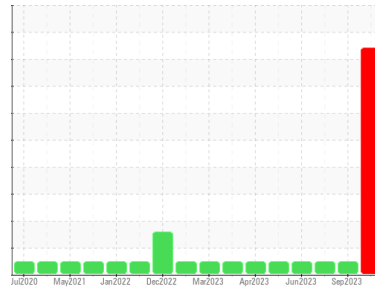
view report





OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id
724002

Component
Diesel Engine

Fluid
PETRO CANADA DURON SHP 15W40 (26 QTS)

DIAGNOSIS

Recommendation

We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

Wear

Gear wear is indicated. Valve 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 oil is no longer serviceable as a result of the abnormal and/or severe wear.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GFL0103483	GFL0094791	GFL0086315
Sample Date	Client Info		28 Nov 2023	28 Sep 2023	19 Jul 2023
Machine Age	hrs	Client Info	22500	22304	22182
Oil Age	hrs	Client Info	445	249	127
Oil Changed	Client Info		N/A	N/A	Not Changd
Sample Status			SEVERE	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<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 >75	246	33	29
Chromium	ppm	ASTM D5185m >5	10	2	2
Nickel	ppm	ASTM D5185m >4	8	<1	<1
Titanium	ppm	ASTM D5185m >2	<1	0	0
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >15	17	5	5
Lead	ppm	ASTM D5185m >25	2	0	0
Copper	ppm	ASTM D5185m >100	4	<1	<1
Tin	ppm	ASTM D5185m >4	1	<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	3	4	3
Barium	ppm	ASTM D5185m 0	0	0	2
Molybdenum	ppm	ASTM D5185m 60	72	60	63
Manganese	ppm	ASTM D5185m 0	2	<1	<1
Magnesium	ppm	ASTM D5185m 1010	1112	928	1087
Calcium	ppm	ASTM D5185m 1070	1184	988	1141
Phosphorus	ppm	ASTM D5185m 1150	1148	1012	1127
Zinc	ppm	ASTM D5185m 1270	1452	1220	1406
Sulfur	ppm	ASTM D5185m 2060	2872	2845	3994

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	23	8	7
Sodium	ppm	ASTM D5185m	18	8	7
Potassium	ppm	ASTM D5185m >20	15	4	5

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >6	2.2	0.3	0.2
Nitration	Abs/cm	*ASTM D7624 >20	12.7	8.0	6.9
Sulfation	Abs.1mm	*ASTM D7415 >30	25.0	18.3	18.0

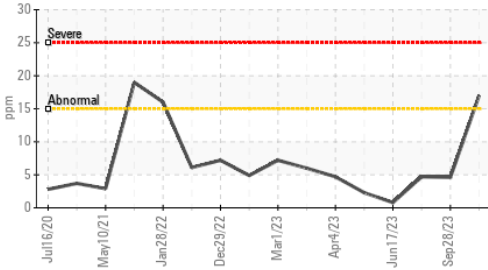
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs.1mm	*ASTM D7414 >25	20.3	14.9	14.2
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	8.4	8.0	9.1

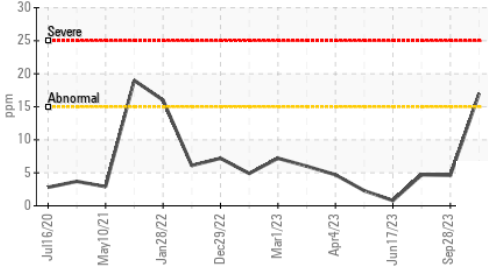


OIL ANALYSIS REPORT

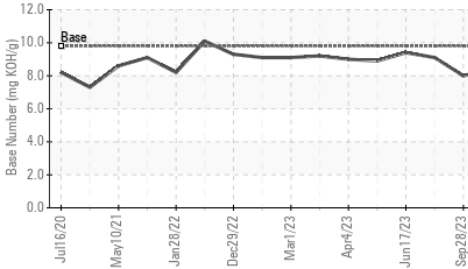
▲ Aluminum (ppm)



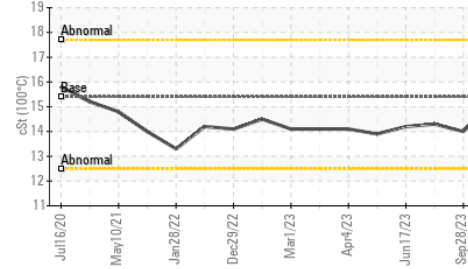
▲ Aluminum (ppm)



Base Number



Viscosity @ 100°C



VISUAL

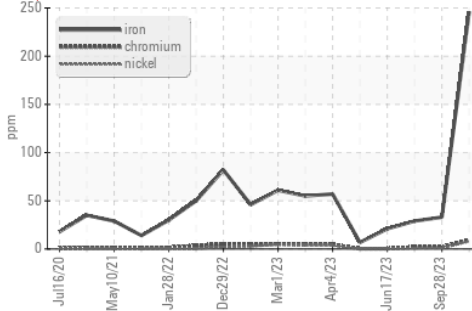
	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar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

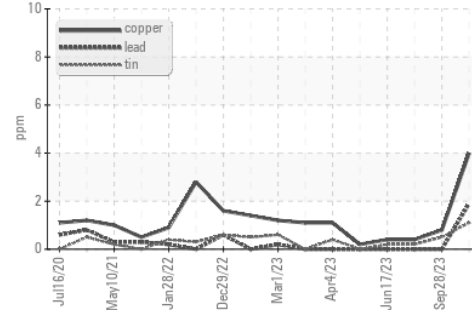
	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	15.2	14.0

GRAPHS

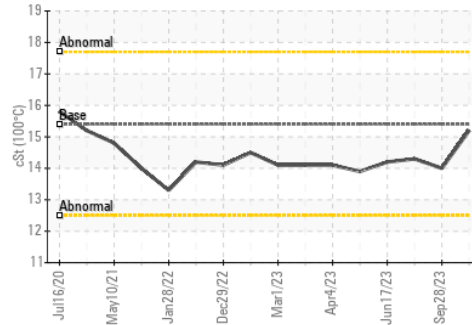
● Ferrous Alloys



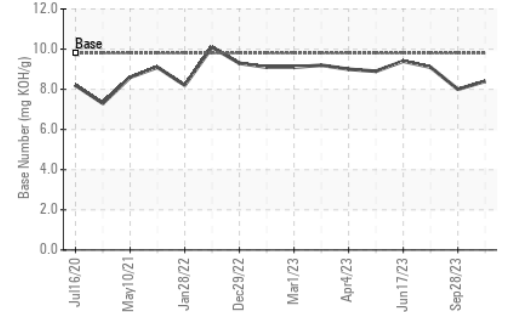
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0103483
Lab Number : 06025981
Unique Number : 10775772
Test Package : FLEET

GFL Environmental - 868 - Childersburg Fines Hauling (Alpine)
 13737 Plant Rd
 Childersburg, AL
 US 35044

Contact: JONATHAN WILLIAMS
 jonathan.williams@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)

T:
F: