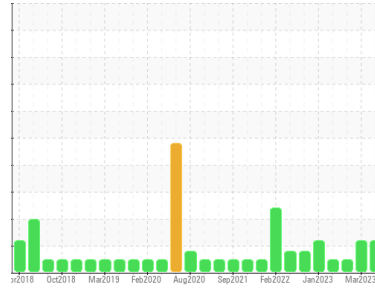




PROBLEM SUMMARY

Sample Rating Trend



VISUAL METAL



Machine Id
10863
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (13 GAL)

COMPONENT CONDITION SUMMARY

No relevant graphs to display

RECOMMENDATION

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	ATTENTION	NORMAL
White Metal	scalar *Visual	▲ MODER	NONE	NONE

Customer Id: GFL010
Sample No.: GFL0088760
Lab Number: 05921997
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
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.

HISTORICAL DIAGNOSIS

17 Mar 2023 Diag: Jonathan Hester

FUEL



No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. Light fuel dilution occurring. 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](#)



03 Mar 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](#)



13 Feb 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.

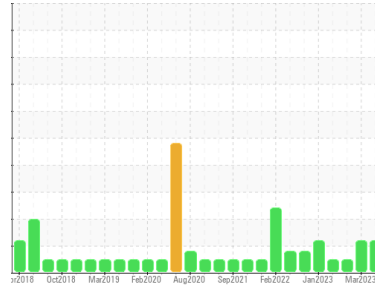
[view report](#)





OIL ANALYSIS REPORT

Sample Rating Trend



VISUAL METAL



Machine Id
10863

Component
Diesel Engine

Fluid
PETRO CANADA DURON SHP 15W40 (13 GAL)

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

Moderate concentration of visible metal present. All component wear rates are normal.

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	GFL0088760	GFL0062595	GFL0062548
Sample Date	Client Info	04 Aug 2023	17 Mar 2023	03 Mar 2023
Machine Age	hrs	40186	13854	13714
Oil Age	hrs	179	433	501
Oil Changed	Client Info	Changed	Not Changd	Not Changd
Sample Status		ABNORMAL	ATTENTION	NORMAL

CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >3.0	<1.0	▲ 2.3	<1.0
Glycol	WC Method	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >75	16	36	19
Chromium	ppm ASTM D5185m >5	<1	1	<1
Nickel	ppm ASTM D5185m >4	<1	<1	0
Titanium	ppm ASTM D5185m >2	<1	0	0
Silver	ppm ASTM D5185m >2	0	0	0
Aluminum	ppm ASTM D5185m >15	7	4	2
Lead	ppm ASTM D5185m >25	<1	0	0
Copper	ppm ASTM D5185m >100	2	2	<1
Tin	ppm ASTM D5185m >4	<1	0	0
Vanadium	ppm ASTM D5185m	0	0	<1
Cadmium	ppm ASTM D5185m	0	0	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 0	63	20	30
Barium	ppm ASTM D5185m 0	0	0	0
Molybdenum	ppm ASTM D5185m 60	55	62	63
Manganese	ppm ASTM D5185m 0	<1	<1	<1
Magnesium	ppm ASTM D5185m 1010	802	687	700
Calcium	ppm ASTM D5185m 1070	1142	1064	1170
Phosphorus	ppm ASTM D5185m 1150	739	866	880
Zinc	ppm ASTM D5185m 1270	895	1087	1133
Sulfur	ppm ASTM D5185m 2060	3041	3028	3127

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	11	7	6
Sodium	ppm ASTM D5185m	8	13	10
Potassium	ppm ASTM D5185m >20	4	<1	1

INFRA-RED

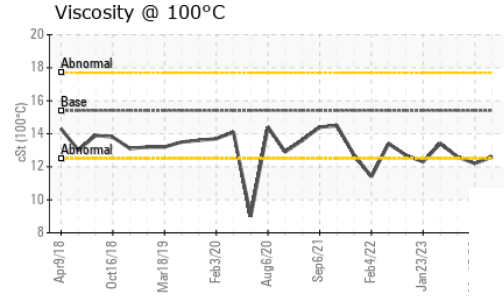
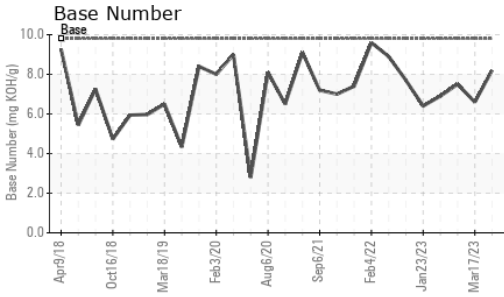
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >6	0.1	0.9	0.6
Nitration	Abs/cm *ASTM D7624 >20	6.0	8.8	7.1
Sulfation	Abs/.1mm *ASTM D7415 >30	18.5	19.3	18.0

FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	14.5	13.9	12.5
Base Number (BN)	mg KOH/g ASTM D2896 9.8	8.2	6.6	7.5



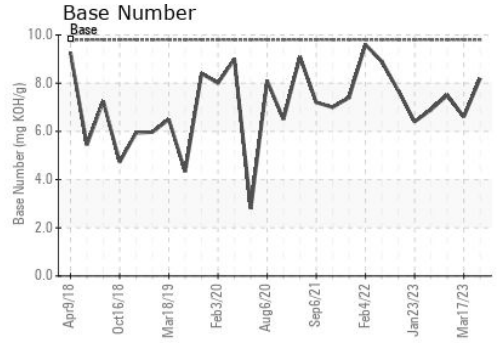
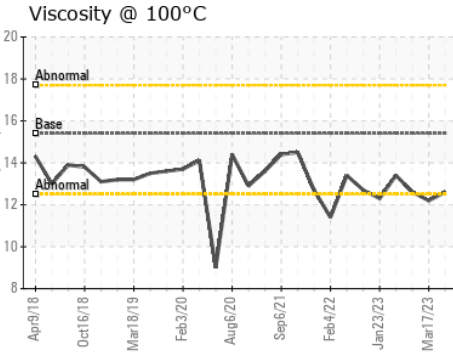
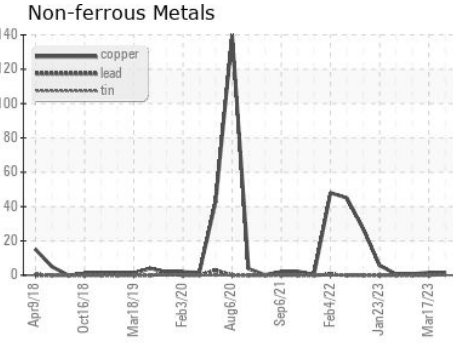
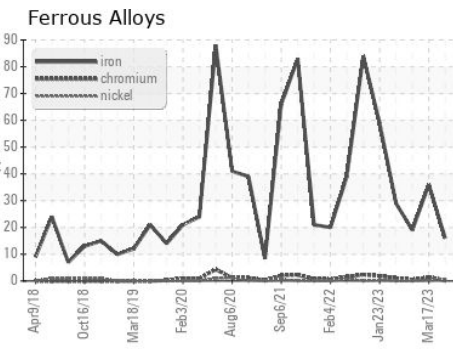
OIL ANALYSIS REPORT



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

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	15.4	12.6	▲ 12.2	12.6

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0088760 **Received** : 11 Aug 2023
Lab Number : 05921997 **Diagnosed** : 14 Aug 2023
Unique Number : 10601944 **Diagnostician** : Jonathan Hester
Test Package : FLEET

GFL Environmental - 010 - Stockbridge
 1280 Rum Creek Parkway
 Stockbridge, GA
 US 30281
 Contact: JOSHUA TINKER
 joshuatinker@gflenv.com

Certificate L2367
 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)