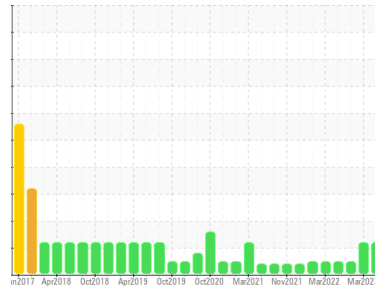




PROBLEM SUMMARY

Sample Rating Trend



FUEL



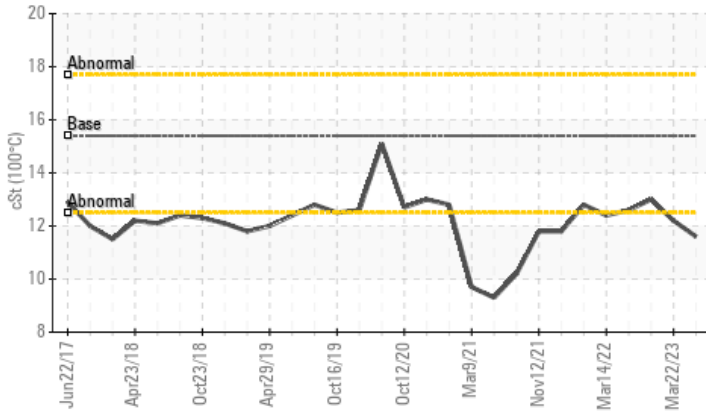
Machine Id
10776

Component
Diesel Engine

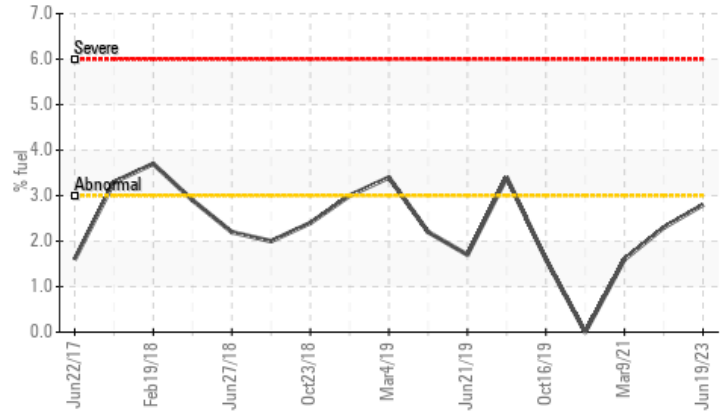
Fluid
PETRO CANADA DURON SHP 15W40 (9 GAL)

COMPONENT CONDITION SUMMARY

▲ Viscosity @ 100°C



▲ Fuel Dilution



RECOMMENDATION

Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ATTENTION	NORMAL
Fuel	%	ASTM D3524	>3.0	▲ 2.8	▲ 2.3	<1.0
Visc @ 100°C	cSt	ASTM D445	15.4	▲ 11.6	▲ 12.2	13.0

Customer Id: GFL034
 Sample No.: GFL0071018
 Lab Number: 05884914
 Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Wes Davis +1 905-569-8600 x223
wesd@wearcheck.ca

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

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

22 Mar 2023 Diag: Don Baldrige

FUEL



Resample at the next service interval to monitor. All component wear rates are normal. Light fuel dilution occurring. No other contaminants were detected in the oil. The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil.

view report



19 Oct 2022 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



06 Jun 2022 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.

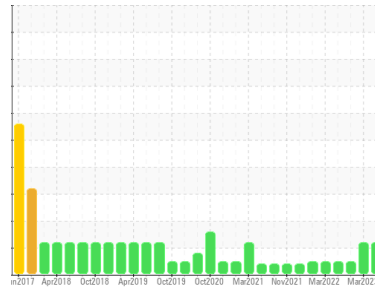
view report





OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Machine Id
10776

Component
Diesel Engine

Fluid
PETRO CANADA DURON SHP 15W40 (9 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Light fuel dilution occurring.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

method	limit/base	current	history 1	history 2
Sample Number	Client Info	GFL0071018	GFL0071005	GFL0050386
Sample Date	Client Info	19 Jun 2023	22 Mar 2023	19 Oct 2022
Machine Age	hrs	Client Info	11940	11940
Oil Age	hrs	Client Info	11940	11940
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		ABNORMAL	ATTENTION	NORMAL

CONTAMINATION

method	limit/base	current	history 1	history 2
Glycol	WC Method	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history 1	history 2		
Iron	ppm	ASTM D5185m	>75	34	65	51
Chromium	ppm	ASTM D5185m	>5	1	2	1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m	>2	<1	2	4
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>15	8	6	3
Lead	ppm	ASTM D5185m	>25	0	0	0
Copper	ppm	ASTM D5185m	>100	<1	<1	2
Tin	ppm	ASTM D5185m	>4	<1	0	<1
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES

method	limit/base	current	history 1	history 2		
Boron	ppm	ASTM D5185m	0	3	5	8
Barium	ppm	ASTM D5185m	0	0	0	<1
Molybdenum	ppm	ASTM D5185m	60	49	50	59
Manganese	ppm	ASTM D5185m	0	<1	1	<1
Magnesium	ppm	ASTM D5185m	1010	803	811	878
Calcium	ppm	ASTM D5185m	1070	991	1372	1172
Phosphorus	ppm	ASTM D5185m	1150	939	995	1005
Zinc	ppm	ASTM D5185m	1270	1172	1244	1239
Sulfur	ppm	ASTM D5185m	2060	3425	3510	3220

CONTAMINANTS

method	limit/base	current	history 1	history 2		
Silicon	ppm	ASTM D5185m	>25	4	5	4
Sodium	ppm	ASTM D5185m		6	6	4
Potassium	ppm	ASTM D5185m	>20	6	4	2
Fuel	%	ASTM D3524	>3.0	▲ 2.8	▲ 2.3	<1.0

INFRA-RED

method	limit/base	current	history 1	history 2		
Soot %	%	*ASTM D7844	>6	0.6	0.7	0.8
Nitration	Abs/cm	*ASTM D7624	>20	9.2	8.6	8.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.2	19.1	20.7

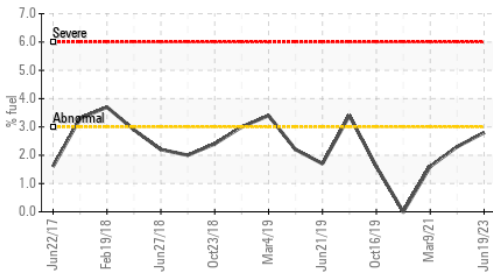
FLUID DEGRADATION

method	limit/base	current	history 1	history 2		
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.6	14.0	14.7
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	6.8	7.7	9.3

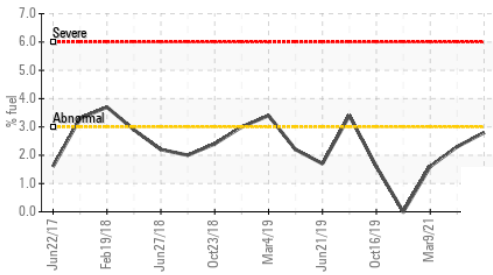


OIL ANALYSIS REPORT

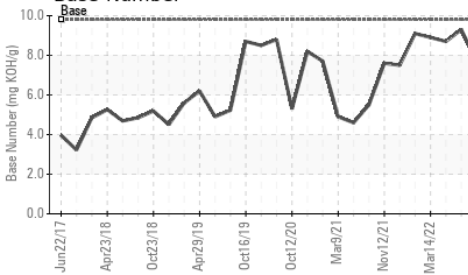
Fuel Dilution



Fuel Dilution



Base Number

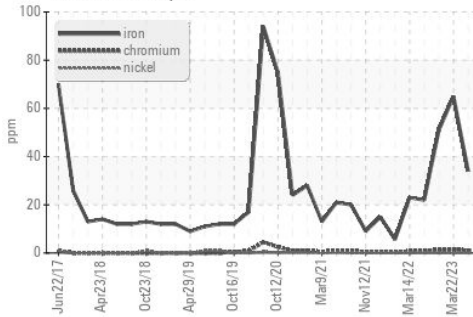


VISUAL	method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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

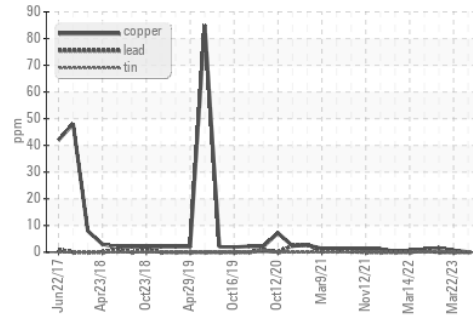
FLUID PROPERTIES	method	limit/base	current	history 1	history 2
Visc @ 100°C	cSt	ASTM D445	15.4	▲ 11.6	▲ 12.2

GRAPHS

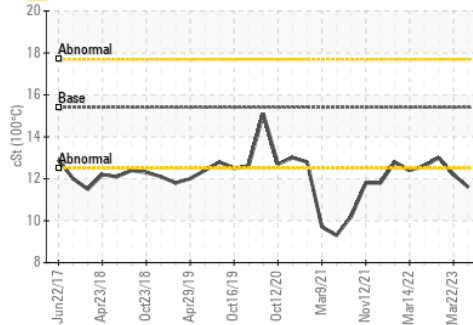
Ferrous Alloys



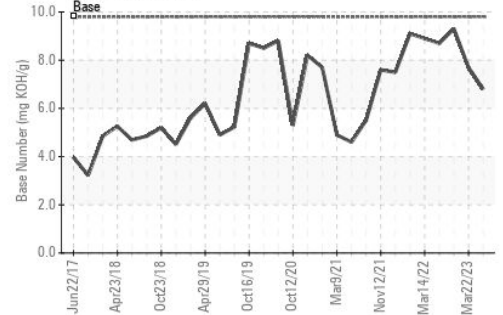
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0071018 **Received** : 27 Jun 2023
Lab Number : 05884914 **Diagnosed** : 30 Jun 2023
Unique Number : 10535397 **Diagnostician** : Wes Davis
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

GFL Environmental - 034 - Delaware South
 28471 John J. Williams Hwy
 Millsboro, DE
 US 19966
 Contact: Brian Houston
 gary.houston@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: