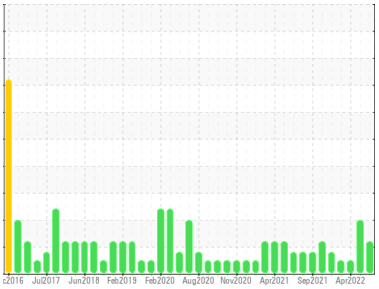
PROBLEM SUMMARY

Sample Rating Trend

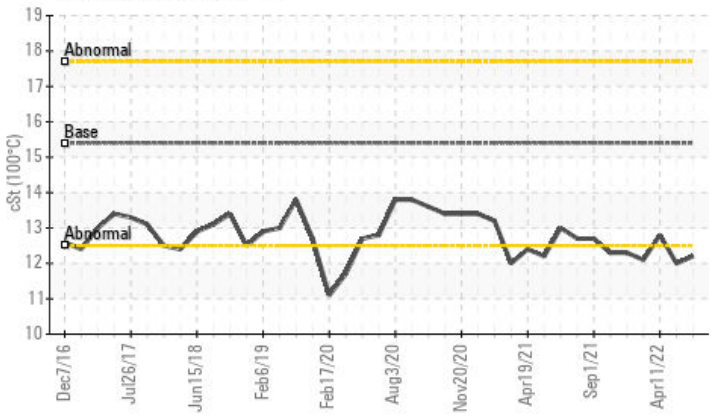


FUEL

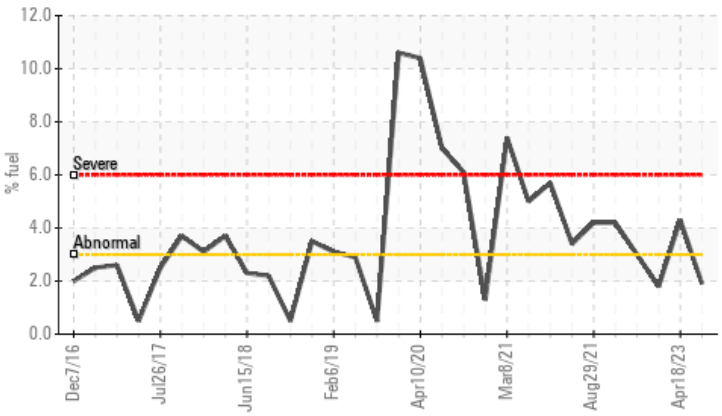
Machine Id
10683
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (7 GAL)

COMPONENT CONDITION SUMMARY

▲ Viscosity @ 100°C



▲ Fuel Dilution



RECOMMENDATION

No corrective action is recommended at this time.
Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				ATTENTION	ABNORMAL	NORMAL
Fuel	%	ASTM D3524	>3.0	▲ **1.9**	▲ 4.3	<1.0
Visc @ 100°C	cSt	ASTM D445	15.4	▲ **12.2**	▲ 12.0	12.8

Customer Id: GFL009
Sample No.: GFL0083211
Lab Number: 05883053
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

18 Apr 2023 Diag: Jonathan Hester

WEAR

No corrective action is recommended at this time. Resample at the next service interval to monitor.The copper level is abnormal. In the absence of other significant wear metals, suspect copper due to sources other than wear (i.e. cooling core). Light fuel dilution occurring. Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

view report

11 Apr 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

04 Feb 2022 Diag: Wes Davis

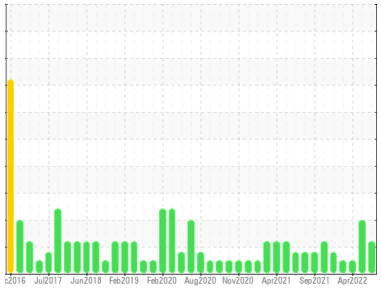
NORMAL

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
10683
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (7 GAL)

DIAGNOSIS

Recommendation
No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

Contamination
Light fuel dilution occurring. No other contaminants were detected in the oil.

Fluid Condition
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history 1	history 2
Sample Number		Client Info		**GFL0083211**	GFL0057648	GFL0042613
Sample Date		Client Info		**22 Jun 2023**	18 Apr 2023	11 Apr 2022
Machine Age	hrs	Client Info		**18442**	15962	15962
Oil Age	hrs	Client Info		**304**	18138	0
Oil Changed		Client Info		**Not Changd**	Not Changd	Not Changd
Sample Status				**ATTENTION**	ABNORMAL	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	**23**	54	20
Chromium	ppm	ASTM D5185m	>5	**<1**	1	<1
Nickel	ppm	ASTM D5185m	>4	**<1**	0	<1
Titanium	ppm	ASTM D5185m	>2	**<1**	4	<1
Silver	ppm	ASTM D5185m	>2	**0**	0	0
Aluminum	ppm	ASTM D5185m	>15	**<1**	2	4
Lead	ppm	ASTM D5185m	>25	**<1**	<1	0
Copper	ppm	ASTM D5185m	>100	**38**	▲ 174	<1
Tin	ppm	ASTM D5185m	>4	**<1**	0	<1
Antimony	ppm	ASTM D5185m		**---**	---	---
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

ADDITIVES		method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m	0	**16**	13	14
Barium	ppm	ASTM D5185m	0	**0**	3	0
Molybdenum	ppm	ASTM D5185m	60	**64**	57	70
Manganese	ppm	ASTM D5185m	0	**<1**	3	<1
Magnesium	ppm	ASTM D5185m	1010	**738**	739	916
Calcium	ppm	ASTM D5185m	1070	**1059**	1085	1257
Phosphorus	ppm	ASTM D5185m	1150	**913**	816	1155
Zinc	ppm	ASTM D5185m	1270	**1067**	1035	1287
Sulfur	ppm	ASTM D5185m	2060	**2673**	2363	2697

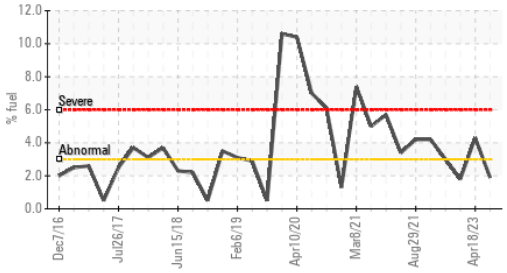
CONTAMINANTS		method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m	>25	**6**	15	9
Sodium	ppm	ASTM D5185m		**0**	2	10
Potassium	ppm	ASTM D5185m	>20	**1**	0	0
Fuel	%	ASTM D3524	>3.0	▲ **1.9**	▲ 4.3	<1.0

INFRA-RED		method	limit/base	current	history 1	history 2
Soot %	%	*ASTM D7844	>6	**0.7**	0.8	0.3
Nitration	Abs/cm	*ASTM D7624	>20	**7.4**	9.4	8.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	**19.2**	19.1	19.8

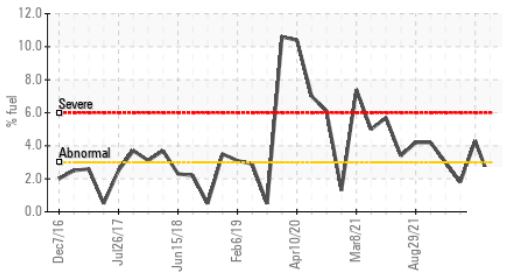
FLUID DEGRADATION		method	limit/base	current	history 1	history 2
Oxidation	Abs/.1mm	*ASTM D7414	>25	**13.5**	16.9	15.0
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	**7.7**	6.0	8.5

OIL ANALYSIS REPORT

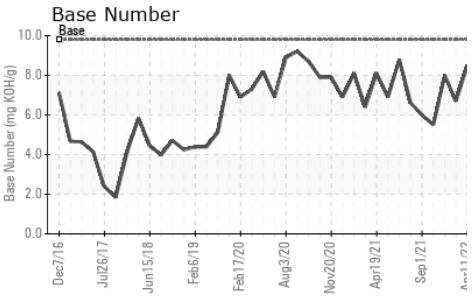
Fuel Dilution



Fuel Dilution



Base Number

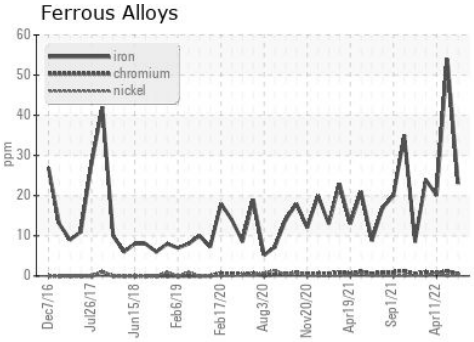


VISUAL		method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt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

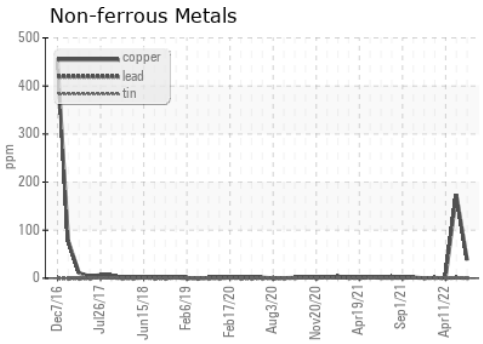
FLUID PROPERTIES		method	limit/base	current	history 1	history 2
Visc @ 100°C	cSt	ASTM D445	15.4	▲ **12.2**	▲ 12.0	12.8

GRAPHS

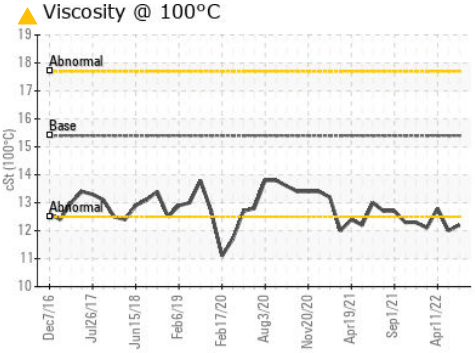
Ferrous Alloys



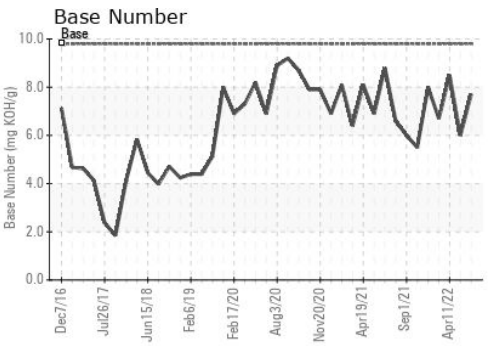
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0083211 **Received** : 26 Jun 2023
Lab Number : 05883053 **Diagnosed** : 30 Jun 2023
Unique Number : 10533536 **Diagnostician** : Wes Davis
Test Package : FLEET (Additional Tests: FUELDILUTION, PercentFuel)

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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