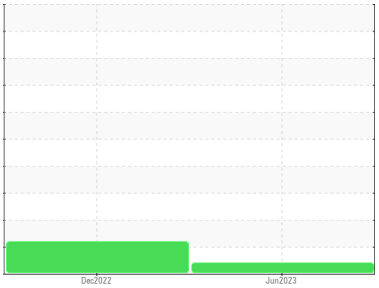
PROBLEM SUMMARY

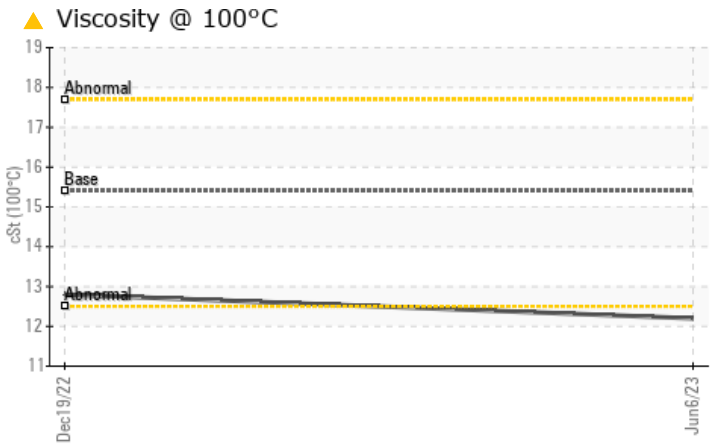
Machine Id
423024
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- QTS)

Sample Rating Trend



VISCOSITY

COMPONENT CONDITION SUMMARY



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				**ATTENTION**	ABNORMAL	---
Visc @ 100°C	cSt	ASTM D445	15.4	▲ **12.2**	12.8	---

Customer Id: GFL405
Sample No.: GFL0072953
Lab Number: 05885405
Test Package: FLEET

To manage this report scan the QR code

To discuss the diagnosis or test data:
Don Baldridge +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
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

19 Dec 2022 Diag: Jonathan Hester

DEGRADATION

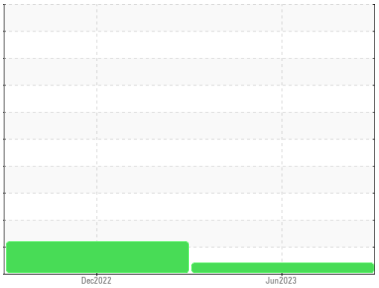
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The BN level is low. The condition of the oil is acceptable for the time in service.

view report

OIL ANALYSIS REPORT

Machine Id
423024
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- QTS)

Sample Rating Trend



VISCOSITY

DIAGNOSIS

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

Wear
All component wear rates are normal.

Contamination
Fuel content negligible. There is no indication of any contamination in the oil.

Fluid Condition
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

SAMPLE INFORMATION		method	limit/base	current	history 1	history 2
Sample Number		Client Info		**GFL0072953**	GFL0060657	---
Sample Date		Client Info		**06 Jun 2023**	19 Dec 2022	---
Machine Age	hrs	Client Info		**22894**	22381	---
Oil Age	hrs	Client Info		**513**	600	---
Oil Changed		Client Info		**Changed**	Changed	---
Sample Status				**ATTENTION**	ABNORMAL	---

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

WEAR METALS		method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m	>120	**4**	36	---
Chromium	ppm	ASTM D5185m	>20	**<1**	1	---
Nickel	ppm	ASTM D5185m	>5	**<1**	2	---
Titanium	ppm	ASTM D5185m	>2	**<1**	<1	---
Silver	ppm	ASTM D5185m	>2	**0**	0	---
Aluminum	ppm	ASTM D5185m	>20	**0**	6	---
Lead	ppm	ASTM D5185m	>40	**<1**	<1	---
Copper	ppm	ASTM D5185m	>330	**<1**	3	---
Tin	ppm	ASTM D5185m	>15	**<1**	2	---
Vanadium	ppm	ASTM D5185m		**0**	0	---
Cadmium	ppm	ASTM D5185m		**<1**	0	---

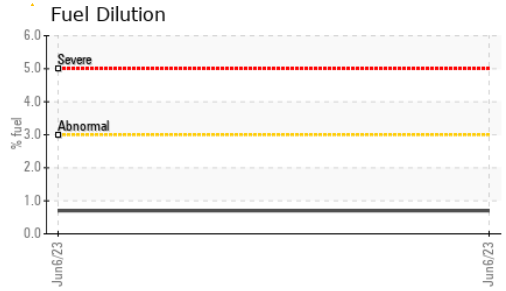
ADDITIVES		method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m	0	**175**	4	---
Barium	ppm	ASTM D5185m	0	**<1**	0	---
Molybdenum	ppm	ASTM D5185m	60	**12**	59	---
Manganese	ppm	ASTM D5185m	0	**<1**	<1	---
Magnesium	ppm	ASTM D5185m	1010	**179**	818	---
Calcium	ppm	ASTM D5185m	1070	**1930**	1060	---
Phosphorus	ppm	ASTM D5185m	1150	**990**	901	---
Zinc	ppm	ASTM D5185m	1270	**1195**	1150	---
Sulfur	ppm	ASTM D5185m	2060	**4127**	2335	---

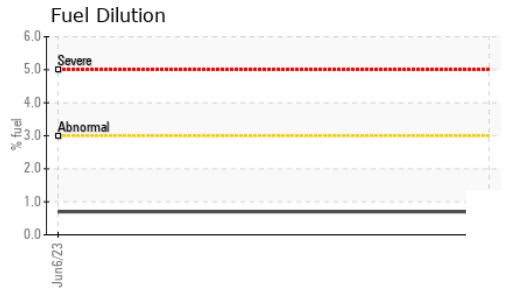
CONTAMINANTS		method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m	>25	**9**	8	---
Sodium	ppm	ASTM D5185m		**3**	33	---
Potassium	ppm	ASTM D5185m	>20	**8**	2	---
Fuel	%	ASTM D3524	>3.0	**0.7**	<1.0	---

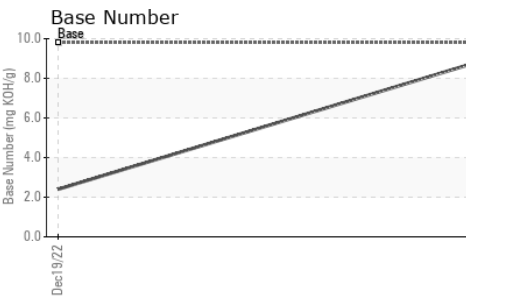
INFRA-RED		method	limit/base	current	history 1	history 2
Soot %	%	*ASTM D7844	>4	**0.1**	0.7	---
Nitration	Abs/cm	*ASTM D7624	>20	**5.7**	17.7	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	**20.0**	29.9	---

FLUID DEGRADATION		method	limit/base	current	history 1	history 2
Oxidation	Abs/.1mm	*ASTM D7414	>25	**15.8**	32.9	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	**9.0**	2.4	---

OIL ANALYSIS REPORT



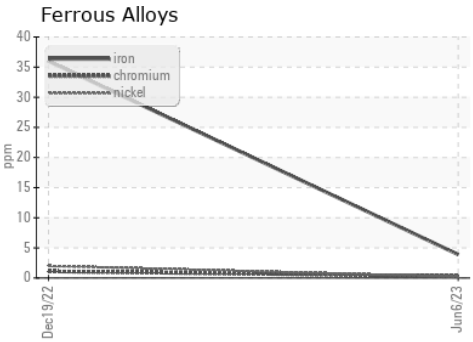


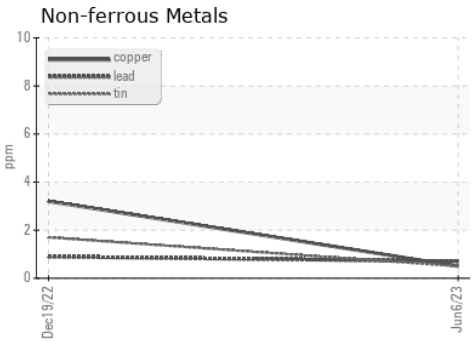


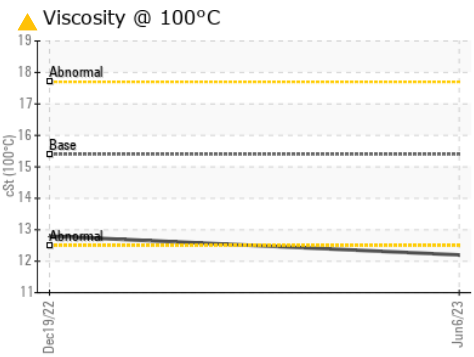
VISUAL		method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	---
Silt	scalar	*Visual	NONE	**NONE**	NONE	---
Debris	scalar	*Visual	NONE	**NONE**	NONE	---
Sand/Dirt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

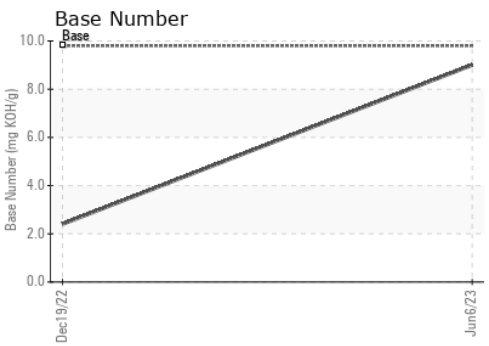
FLUID PROPERTIES		method	limit/base	current	history 1	history 2
Visc @ 100°C	cSt	ASTM D445	15.4	▲ **12.2**	12.8	---

GRAPHS









Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0072953 **Received** : 28 Jun 2023
Lab Number : 05885405 **Diagnosed** : 30 Jun 2023
Unique Number : 10535888 **Diagnostician** : Don Baldridge
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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