



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Area

**(RB27051)**

Machine Id

**924048**

Component

**Diesel Engine**

Fluid

**PETRO CANADA DURON SHP 15W40 (38 QTS)**



**RECOMMENDATION**

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0120605</b>	GFL0108553	GFL0066125
Sample Date		Client Info		<b>06 May 2024</b>	22 Mar 2024	05 Oct 2023
Machine Age	hrs	Client Info		<b>0</b>	4998	4567
Oil Age	hrs	Client Info		<b>0</b>	600	500
Filter Age	hrs	Client Info		<b>0</b>	600	500
Oil Changed		Client Info		<b>N/A</b>	Changed	Changed
Filter Changed		Client Info		<b>N/A</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	SEVERE	SEVERE

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>120	<b>2</b>	31	31
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	1	<1
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m	>20	<b>&lt;1</b>	4	3
Lead	ppm	ASTM D5185m	>40	<b>0</b>	1	2
Copper	ppm	ASTM D5185m	>330	<b>0</b>	24	42
Tin	ppm	ASTM D5185m	>15	<b>0</b>	2	3
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

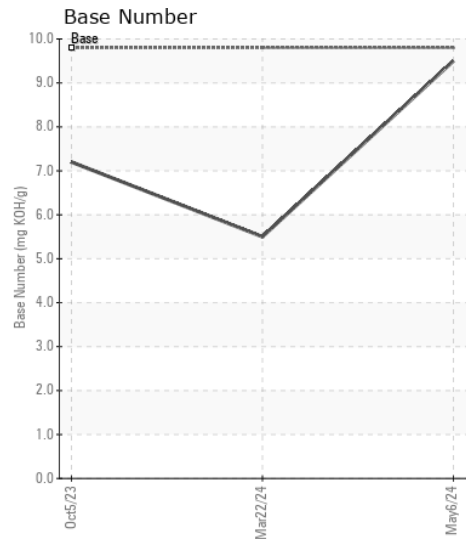
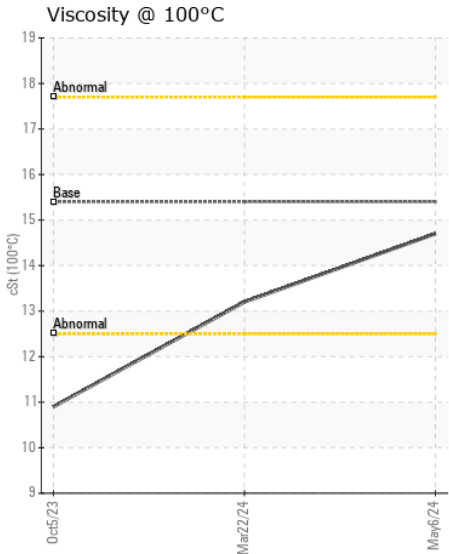
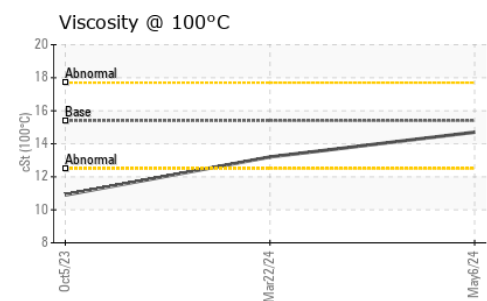
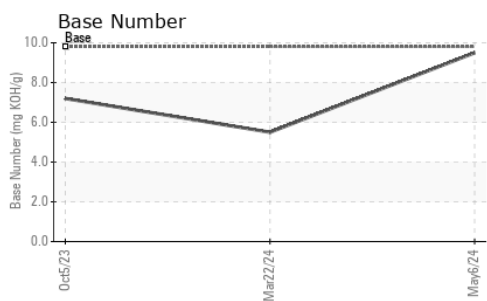
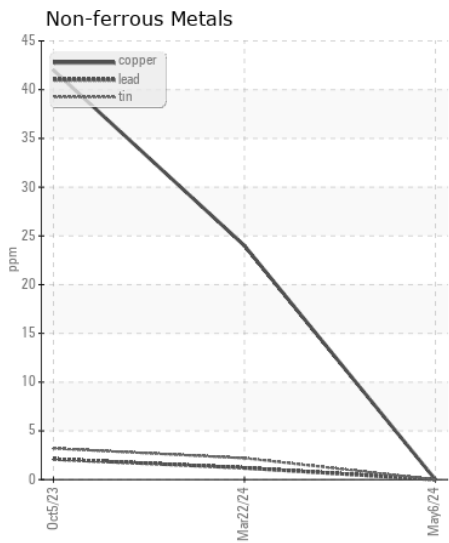
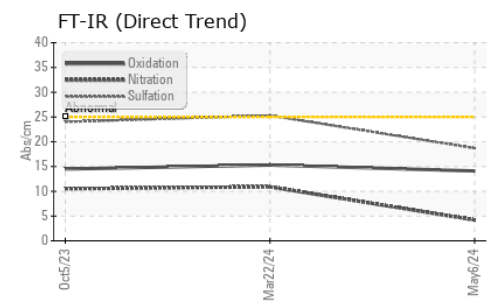
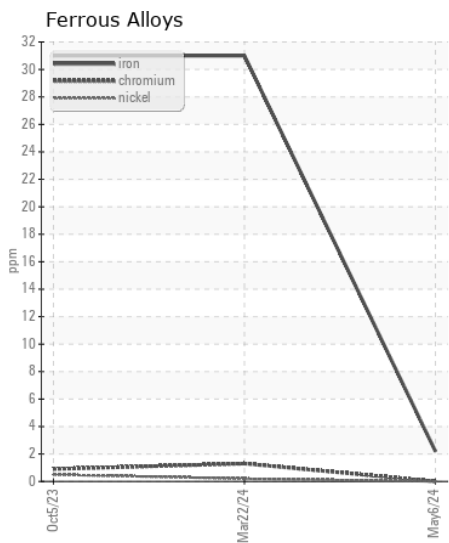
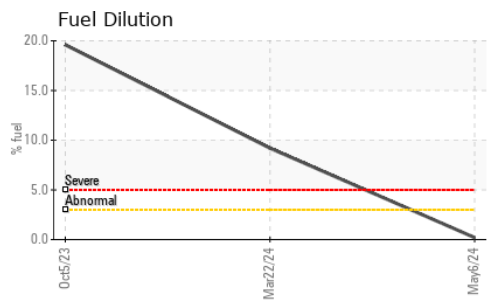
Fuel content negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>4</b>	6	4
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	4	2
Fuel	%	ASTM D3524	>3.0	<b>0.2</b>	▲ 9.2	▲ 19.6
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>4	<b>0.1</b>	▲ 4	3.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>4.2</b>	10.9	10.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.7</b>	25.3	24.0
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	NEG

**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.

Sodium	ppm	ASTM D5185m		<b>2</b>	2	2
Boron	ppm	ASTM D5185m	0	<b>9</b>	4	7
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>62</b>	56	44
Manganese	ppm	ASTM D5185m	0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>991</b>	848	711
Calcium	ppm	ASTM D5185m	1070	<b>1131</b>	995	825
Phosphorus	ppm	ASTM D5185m	1150	<b>1055</b>	936	766
Zinc	ppm	ASTM D5185m	1270	<b>1227</b>	1102	921
Sulfur	ppm	ASTM D5185m	2060	<b>4026</b>	2807	2108
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.1</b>	15.3	14.5
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>9.5</b>	5.5	7.2
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.7</b>	13.2	▲ 10.9



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0120605 **Received** : 14 May 2024  
**Lab Number** : 06178355 **Tested** : 16 May 2024  
**Unique Number** : 11029681 **Diagnosed** : 16 May 2024 - Wes Davis  
**Test Package** : FLEET ( Additional Tests: PercentFuel )

**GFL Environmental - 904 - Chippewa Falls HC**  
 11888 & 11863 30th Avenue  
 Chippewa Falls, WI  
 US 54729  
 Contact: Andy Kane

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: (715)202-3420

F: