



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

Area

**(MC12184)**

Machine Id

**821020**

Component

**Diesel Engine**

Fluid

**PETRO CANADA DURON SHP 15W40 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0106245</b>	GFL0067006	---
Sample Date		Client Info		<b>20 Jun 2024</b>	20 Jul 2023	---
Machine Age	hrs	Client Info		<b>21820</b>	20797	---
Oil Age	hrs	Client Info		<b>0</b>	0	---
Filter Age	hrs	Client Info		<b>0</b>	0	---
Oil Changed		Client Info		<b>Changed</b>	Changed	---
Filter Changed		Client Info		<b>Changed</b>	Changed	---
Sample Status				<b>NORMAL</b>	NORMAL	---

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>120	<b>28</b>	24	---
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	---
Nickel	ppm	ASTM D5185m	>5	<b>3</b>	4	---
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	0	---
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>20	<b>7</b>	13	---
Lead	ppm	ASTM D5185m	>40	<b>1</b>	3	---
Copper	ppm	ASTM D5185m	>330	<b>2</b>	2	---
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	2	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

**CONTAMINATION**

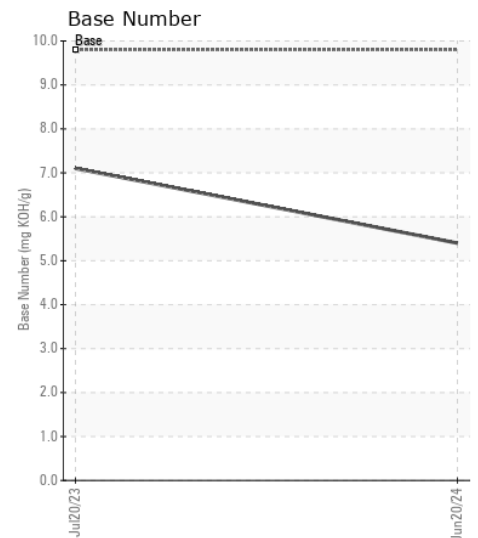
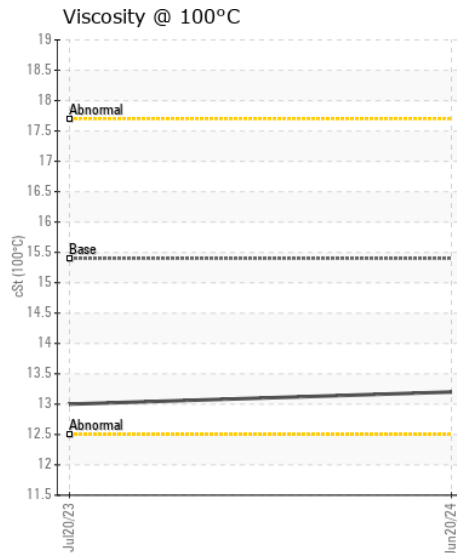
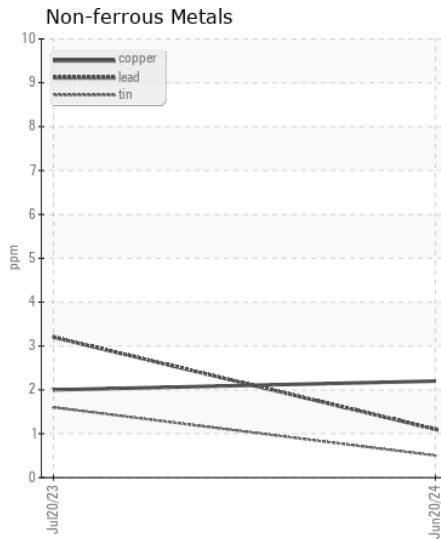
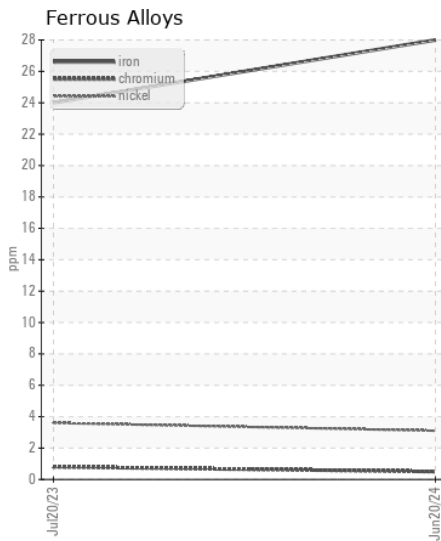
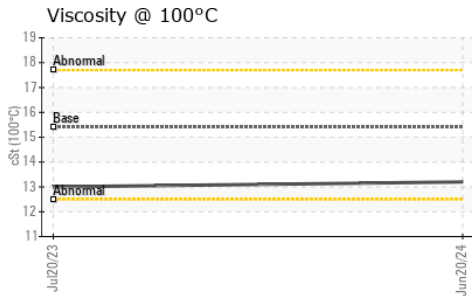
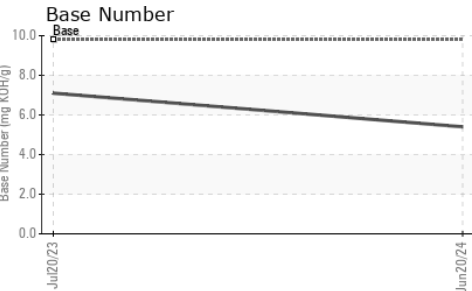
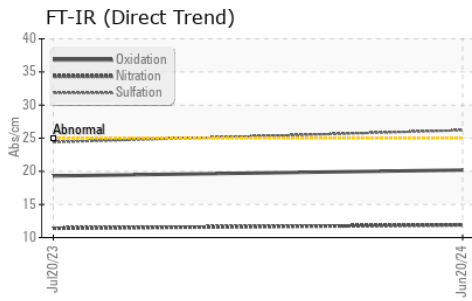
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>5</b>	7	---
Potassium	ppm	ASTM D5185m	>20	<b>5</b>	2	---
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	<1.0	---
Water		WC Method	>0.2	<b>NEG</b>	NEG	---
Glycol		WC Method		<b>NEG</b>	NEG	---
Soot %	%	*ASTM D7844	>4	<b>1.6</b>	1.1	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>11.9</b>	11.4	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>26.2</b>	24.4	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	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>8</b>	8	---
Boron	ppm	ASTM D5185m	0	<b>4</b>	43	---
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m	60	<b>64</b>	97	---
Manganese	ppm	ASTM D5185m	0	<b>0</b>	1	---
Magnesium	ppm	ASTM D5185m	1010	<b>876</b>	753	---
Calcium	ppm	ASTM D5185m	1070	<b>1094</b>	1390	---
Phosphorus	ppm	ASTM D5185m	1150	<b>885</b>	748	---
Zinc	ppm	ASTM D5185m	1270	<b>1224</b>	964	---
Sulfur	ppm	ASTM D5185m	2060	<b>2616</b>	3139	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>20.2</b>	19.3	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>5.4</b>	7.1	---
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.2</b>	13.0	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0106245  
**Lab Number** : 06220912  
**Unique Number** : 11099109  
**Test Package** : FLEET

**Received** : 26 Jun 2024  
**Tested** : 27 Jun 2024  
**Diagnosed** : 27 Jun 2024 - Wes Davis

**GFL Environmental - 916 - Greenbay HC**  
 1799 County Trunk PP  
 DePere, WI  
 US 54115

Contact: Travis Runge  
 travis.runge@gflenv.com  
 T: (920)351-2341

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)

F: