



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



Area  
**(BC71104)**  
Machine Id  
**345M**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**

**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>GFL0101002</b>	GFL0016186	---
Sample Date		Client Info		<b>17 May 2024</b>	18 Mar 2021	---
Machine Age	hrs	Client Info		<b>19386</b>	19386	---
Oil Age	hrs	Client Info		<b>19386</b>	19386	---
Filter Age	hrs	Client Info		<b>0</b>	19386	---
Oil Changed		Client Info		<b>Changed</b>	Changed	---
Filter Changed		Client Info		<b>Changed</b>	Changed	---
Sample Status				<b>NORMAL</b>	SEVERE	---

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>120	<b>7</b>	10	---
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	<1	---
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	<1	---
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	<1	---
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>20	<b>4</b>	4	---
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	0	---
Copper	ppm	ASTM D5185m	>330	<b>0</b>	1	---
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	---
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**

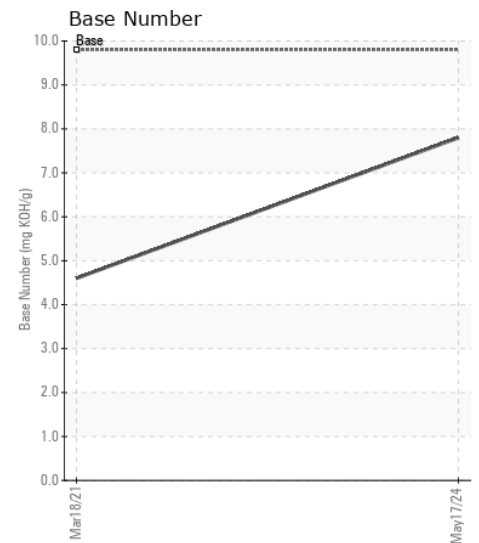
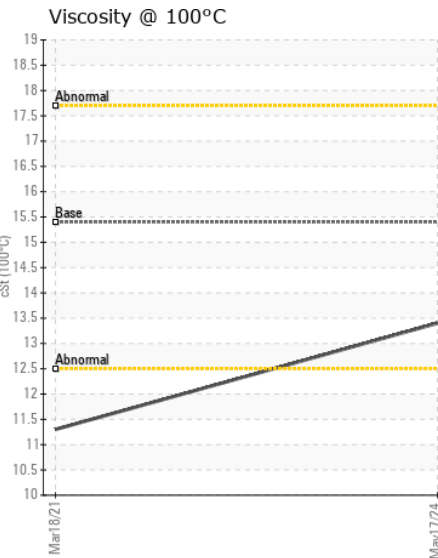
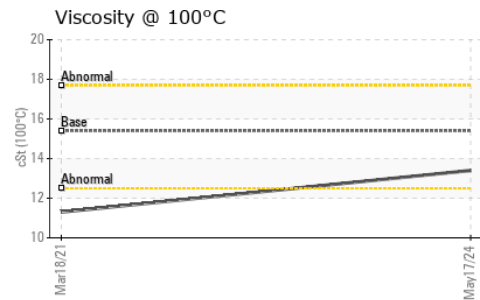
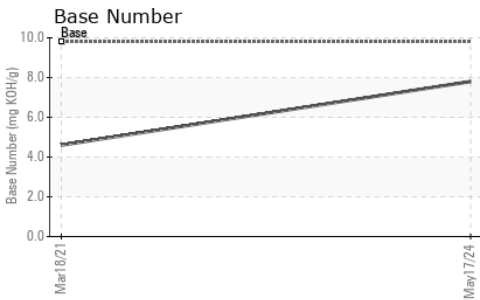
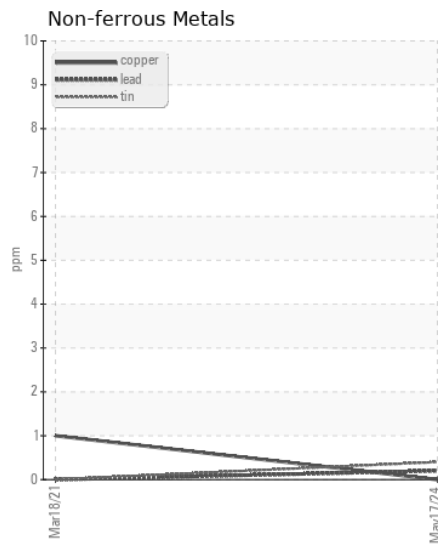
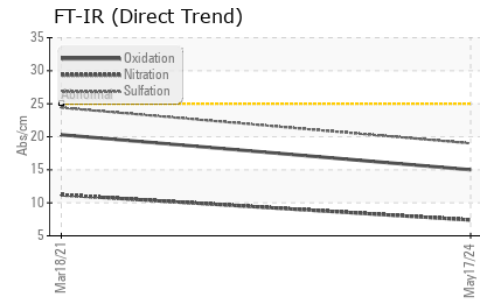
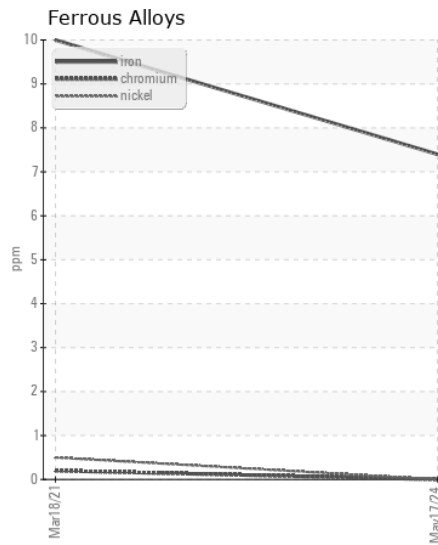
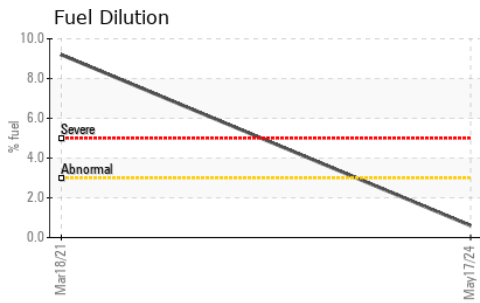
Fuel content negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>4</b>	6	---
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	12	---
Fuel	%	ASTM D3524	>3.0	<b>0.6</b>	▲ 9.2	---
Water		WC Method	>0.2	<b>NEG</b>	NEG	---
Glycol		WC Method		<b>NEG</b>	NEG	---
Soot %	%	*ASTM D7844	>4	<b>0.3</b>	0.3	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.4</b>	11.2	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.0</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>4</b>	7	---
Boron	ppm	ASTM D5185m	0	<b>7</b>	4	---
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m	60	<b>59</b>	52	---
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185m	1010	<b>898</b>	855	---
Calcium	ppm	ASTM D5185m	1070	<b>978</b>	971	---
Phosphorus	ppm	ASTM D5185m	1150	<b>968</b>	911	---
Zinc	ppm	ASTM D5185m	1270	<b>1178</b>	1047	---
Sulfur	ppm	ASTM D5185m	2060	<b>3263</b>	2082	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.0</b>	20.3	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>7.8</b>	4.6	---
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.4</b>	▲ 11.3	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0101002 **Received** : 23 May 2024  
**Lab Number** : 06188900 **Tested** : 28 May 2024  
**Unique Number** : 11045652 **Diagnosed** : 28 May 2024 - Wes Davis  
**Test Package** : FLEET ( Additional Tests: PercentFuel )

**GFL Environmental - 455 - Flint**  
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 F:

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)