



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

Machine Id  
**125013-1122**  
 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>GFL0099634</b>	GFL0061042	GFL0030395
Sample Date		Client Info		<b>20 May 2024</b>	02 Dec 2023	19 Jun 2023
Machine Age	hrs	Client Info		<b>7150</b>	6779	6175
Oil Age	hrs	Client Info		<b>490</b>	610	580
Filter Age	hrs	Client Info		<b>490</b>	610	580
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>110	<b>11</b>	18	13
Chromium	ppm	ASTM D5185m	>4	<b>&lt;1</b>	1	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>2</b>	5	1
Lead	ppm	ASTM D5185m	>45	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m	>85	<b>1</b>	1	<1
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

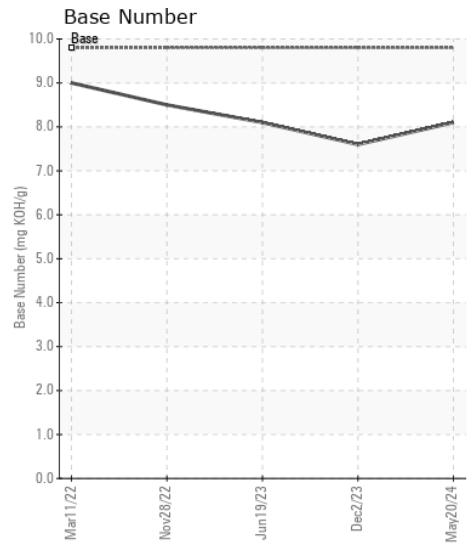
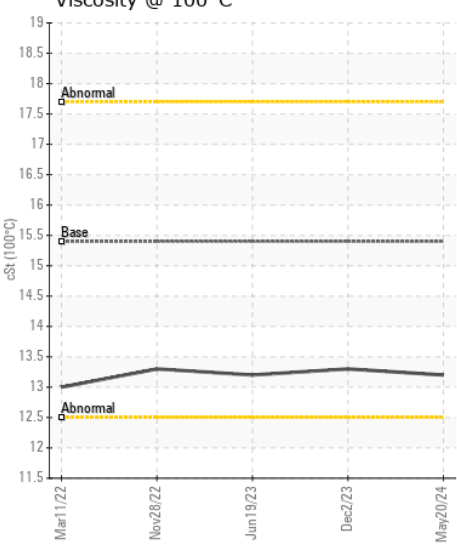
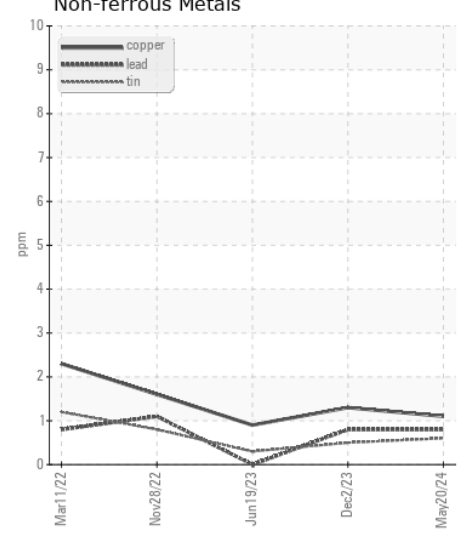
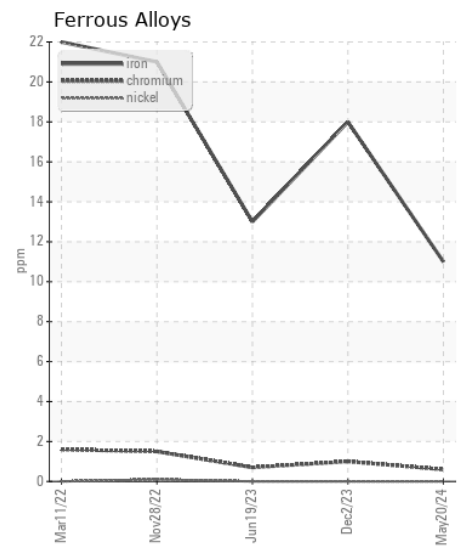
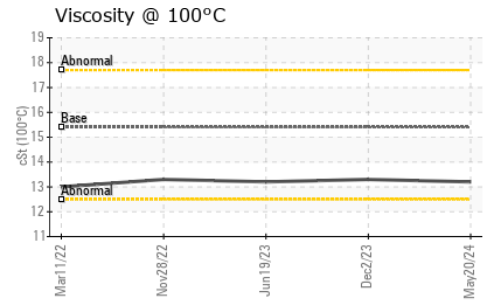
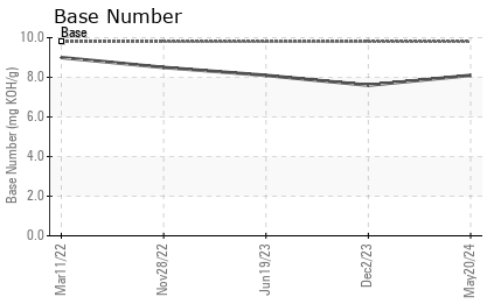
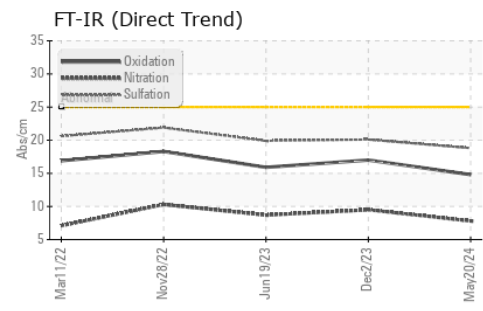
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>30	<b>4</b>	6	4
Potassium	ppm	ASTM D5185m	>20	<b>6</b>	15	5
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.3</b>	0.4	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.8</b>	9.5	8.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.8</b>	20.1	19.9
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>0</b>	1	2
Boron	ppm	ASTM D5185m	0	<b>7</b>	7	13
Barium	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>65</b>	64	59
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>937</b>	1026	889
Calcium	ppm	ASTM D5185m	1070	<b>1102</b>	1184	1182
Phosphorus	ppm	ASTM D5185m	1150	<b>1122</b>	1080	986
Zinc	ppm	ASTM D5185m	1270	<b>1244</b>	1324	1214
Sulfur	ppm	ASTM D5185m	2060	<b>3286</b>	3026	3299
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.8</b>	17.0	15.9
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.1</b>	7.6	8.1
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.2</b>	13.3	13.2



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0099634 **Received** : 31 May 2024  
**Lab Number** : 06196323 **Tested** : 03 Jun 2024  
**Unique Number** : 11058446 **Diagnosed** : 03 Jun 2024 - Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 633 - Grand Haven**  
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 T:  
 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)