



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

Machine Id  
**913048**  
 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>GFL0093744</b>	GFL0093728	GFL0079030
Sample Date		Client Info		<b>24 Jan 2024</b>	27 Oct 2023	10 Aug 2023
Machine Age	hrs	Client Info		<b>2378</b>	1793	1177
Oil Age	hrs	Client Info		<b>1793</b>	1177	598
Filter Age	hrs	Client Info		<b>0</b>	0	0
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	>90	<b>15</b>	15	21
Chromium	ppm	ASTM D5185m	>20	<b>1</b>	2	2
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>4</b>	8	7
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185m	>330	<b>1</b>	1	2
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

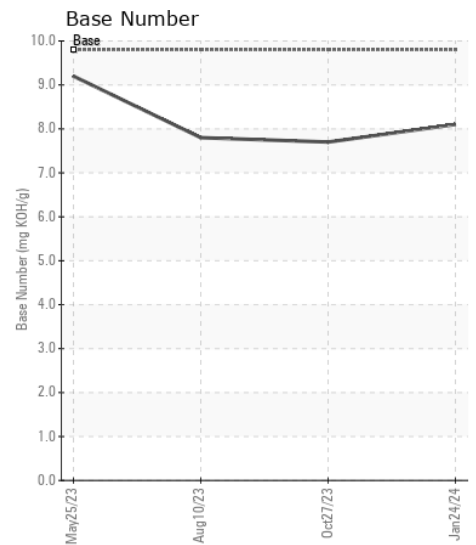
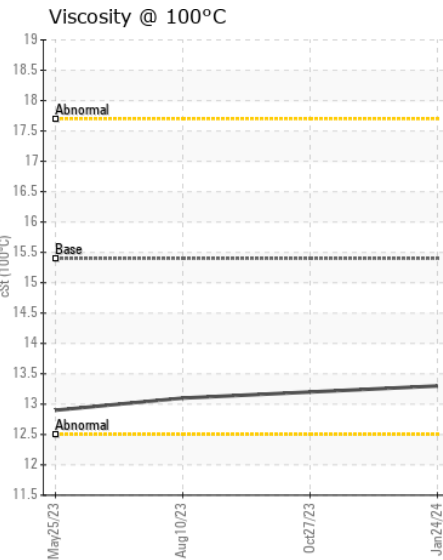
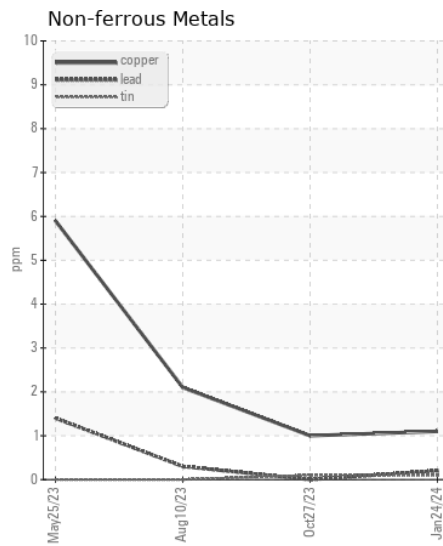
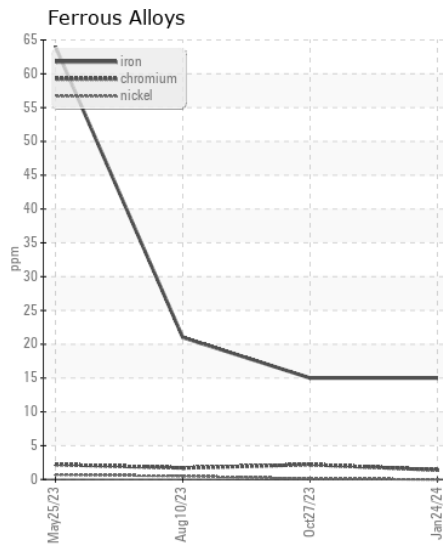
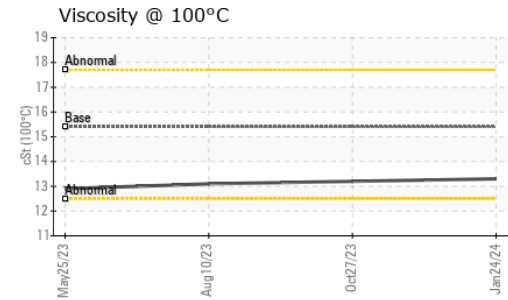
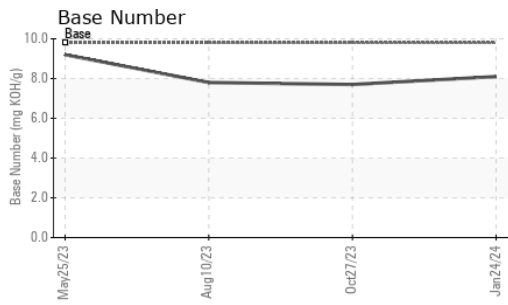
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>4</b>	5	5
Potassium	ppm	ASTM D5185m	>20	<b>10</b>	22	23
Fuel		WC Method	>3.0	<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	>6	<b>0.4</b>	0.4	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.6</b>	6.6	6.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.0</b>	17.7	17.6
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>&lt;1</b>	3	2
Boron	ppm	ASTM D5185m	0	<b>9</b>	2	5
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>51</b>	57	55
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>867</b>	853	823
Calcium	ppm	ASTM D5185m	1070	<b>1023</b>	990	1031
Phosphorus	ppm	ASTM D5185m	1150	<b>917</b>	1021	950
Zinc	ppm	ASTM D5185m	1270	<b>1201</b>	1183	1150
Sulfur	ppm	ASTM D5185m	2060	<b>2993</b>	3291	3167
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>13.2</b>	13.0	13.0
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.1</b>	7.7	7.8
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.3</b>	13.2	13.1



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0093744 **Received** : 30 Jan 2024  
**Lab Number** : 06074509 **Diagnosed** : 31 Jan 2024  
**Unique Number** : 10856600 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 029 - Wytheville**  
 2390 North 4th Street  
 Wytheville, VA  
 US 24382

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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)