



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

Machine Id  
**529012-7026**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 15W40 (--- LTR)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0103870</b>	GFL0101376	GFL0091792
Sample Date		Client Info		<b>07 Feb 2024</b>	17 Nov 2023	27 Oct 2023
Machine Age	hrs	Client Info		<b>12980</b>	12530	12490
Oil Age	hrs	Client Info		<b>12530</b>	10064	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Changd</b>	Changed	Not Changd
Filter Changed		Client Info		<b>Not Changd</b>	Changed	Not Changd
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>110	<b>15</b>	35	21
Chromium	ppm	ASTM D5185m	>4	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>3</b>	6	2
Lead	ppm	ASTM D5185m	>45	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>85	<b>0</b>	2	1
Tin	ppm	ASTM D5185m	>4	<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**

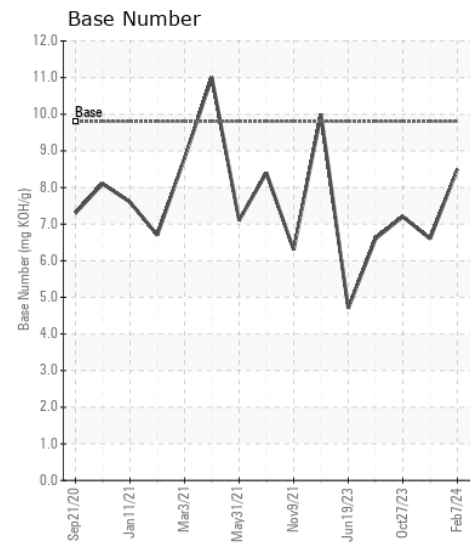
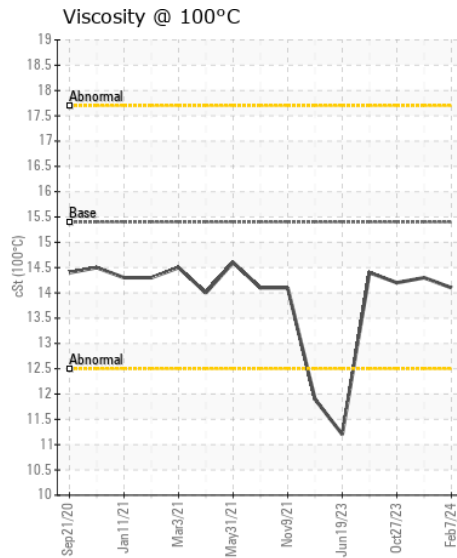
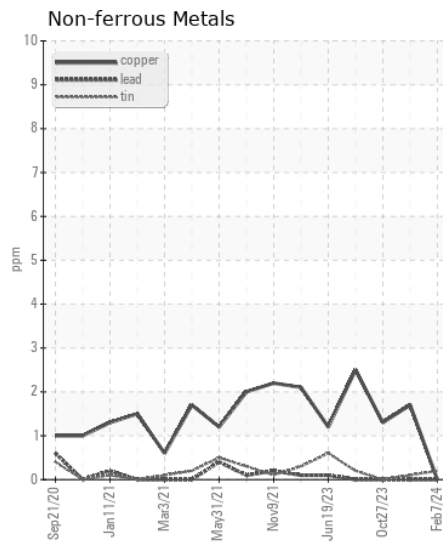
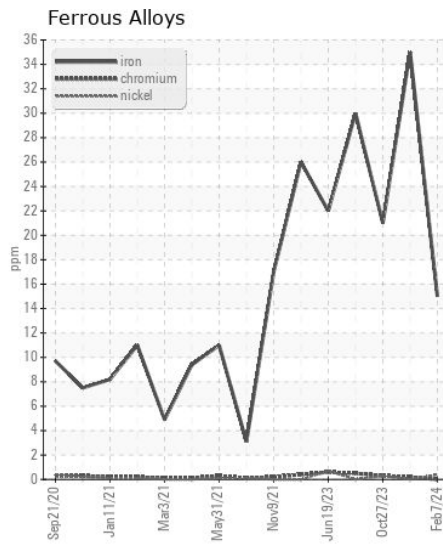
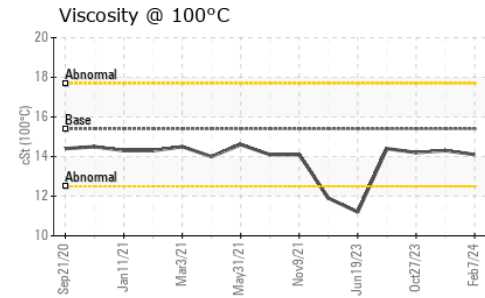
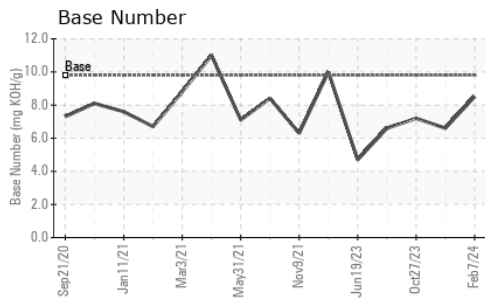
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>30	<b>6</b>	6	5
Potassium	ppm	ASTM D5185m	>20	<b>5</b>	11	6
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>	0.6	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.8</b>	9.7	8.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.7</b>	21.3	19.3
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>	3	4
Boron	ppm	ASTM D5185m	0	<b>4</b>	3	5
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	20
Molybdenum	ppm	ASTM D5185m	60	<b>60</b>	58	58
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>970</b>	931	851
Calcium	ppm	ASTM D5185m	1070	<b>1047</b>	1007	911
Phosphorus	ppm	ASTM D5185m	1150	<b>1096</b>	1005	955
Zinc	ppm	ASTM D5185m	1270	<b>1311</b>	1223	1089
Sulfur	ppm	ASTM D5185m	2060	<b>3221</b>	3130	3568
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.0</b>	17.5	15.6
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.5</b>	6.6	7.2
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.1</b>	14.3	14.2



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0103870  
**Lab Number** : 06088021  
**Unique Number** : 10875466  
**Test Package** : FLEET

**Received** : 13 Feb 2024  
**Tested** : 14 Feb 2024  
**Diagnosed** : 14 Feb 2024 - Wes Davis

**GFL Environmental - 654 - Richmond Hauling**  
 11800 Lewis Road  
 Chester, VA  
 US 23831  
 Contact: Jimmy Mayes  
 jmayes@gflenv.com

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)

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F: