



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

Machine Id  
**927085-260324**

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>GFL0109156</b>	GFL0098370	GFL0098333
Sample Date		Client Info		<b>31 Jan 2024</b>	26 Dec 2023	27 Nov 2023
Machine Age	hrs	Client Info		<b>18241</b>	17945	17761
Oil Age	hrs	Client Info		<b>700</b>	700	700
Filter Age	hrs	Client Info		<b>700</b>	700	700
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Changed
Filter Changed		Client Info		<b>Not Changd</b>	Not Changd	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>24</b>	10	28
Chromium	ppm	ASTM D5185m	>20	<b>1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	3	4
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m	>330	<b>1</b>	<1	<1
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**

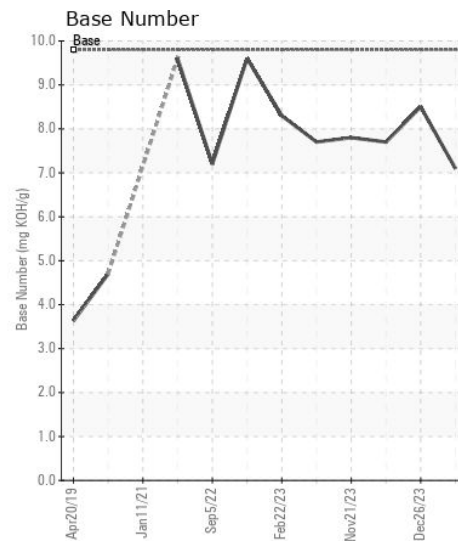
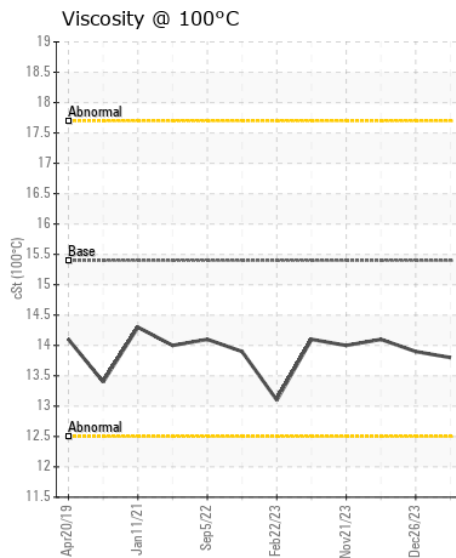
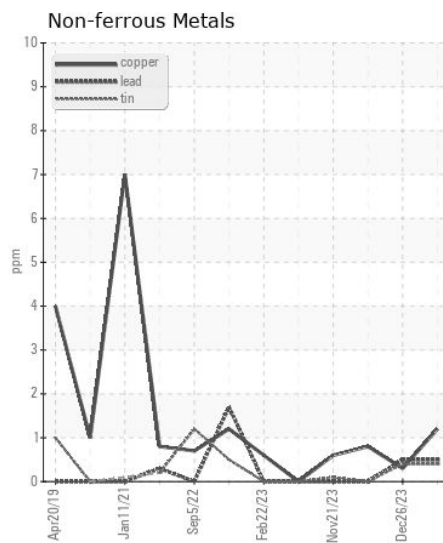
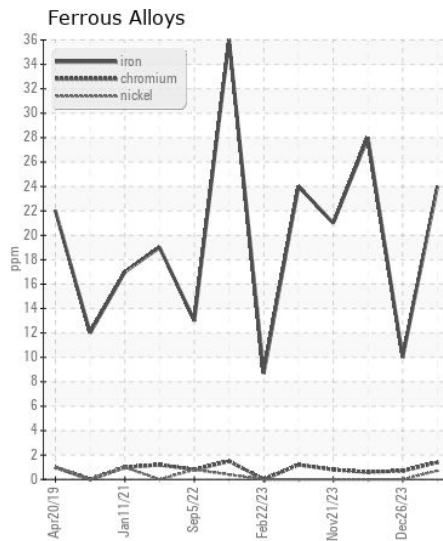
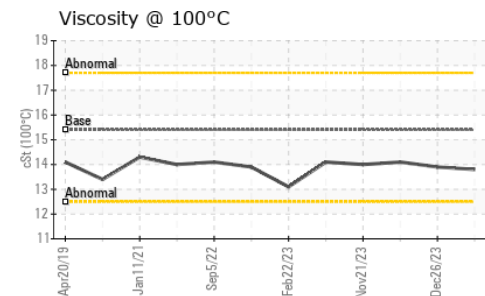
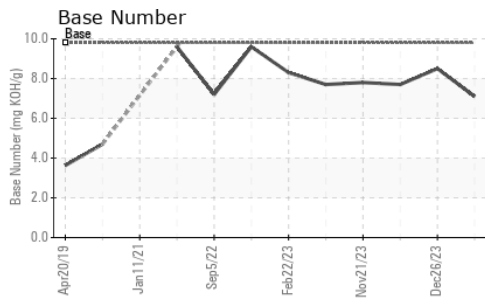
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>6</b>	5	12
Potassium	ppm	ASTM D5185m	>20	<b>8</b>	0	2
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>0.8</b>	0.3	1.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.4</b>	5.9	10.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.8</b>	18.0	21.6
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>58</b>	4	3
Boron	ppm	ASTM D5185m	0	<b>1</b>	<1	0
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	3
Molybdenum	ppm	ASTM D5185m	60	<b>70</b>	56	63
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185m	1010	<b>1023</b>	924	911
Calcium	ppm	ASTM D5185m	1070	<b>1104</b>	1011	1026
Phosphorus	ppm	ASTM D5185m	1150	<b>1052</b>	1056	981
Zinc	ppm	ASTM D5185m	1270	<b>1325</b>	1183	1189
Sulfur	ppm	ASTM D5185m	2060	<b>2968</b>	3010	3033
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.9</b>	13.1	17.4
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>7.1</b>	8.5	7.7
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.8</b>	13.9	14.1



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0109156  
**Lab Number** : 06085237  
**Unique Number** : 10872682  
**Test Package** : FLEET

**Received** : 09 Feb 2024  
**Tested** : 12 Feb 2024  
**Diagnosed** : 12 Feb 2024 - Wes Davis

**GFL Environmental - 822 - Springfield Hauling**  
 2120 West Bennett Street  
 Springfield, MO  
 US 65807

Contact: Dennis Moore  
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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)