



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



Machine Id  
**420031**  
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>GFL0100899</b>	GFL0086902	GFL0086875
Sample Date		Client Info		<b>06 Feb 2024</b>	05 Oct 2023	12 Sep 2023
Machine Age	mls	Client Info		<b>42843</b>	428320	39340
Oil Age	mls	Client Info		<b>0</b>	428320	600
Filter Age	mls	Client Info		<b>0</b>	0	600
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**

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>80	<b>3</b>	14	9
Chromium	ppm	ASTM D5185m	>5	<b>0</b>	<1	1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>30	<b>&lt;1</b>	0	1
Lead	ppm	ASTM D5185m	>30	<b>0</b>	<1	1
Copper	ppm	ASTM D5185m	>150	<b>&lt;1</b>	1	2
Tin	ppm	ASTM D5185m	>5	<b>0</b>	<1	2
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**

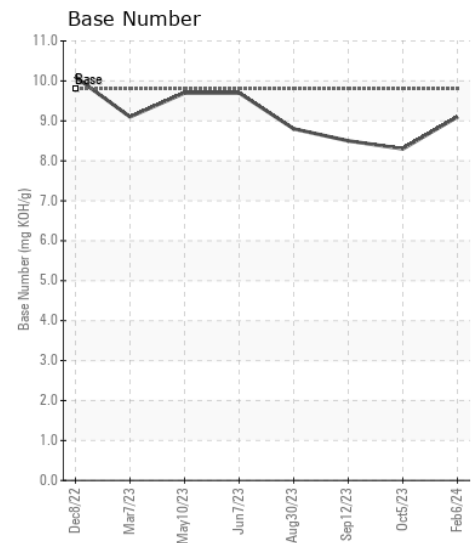
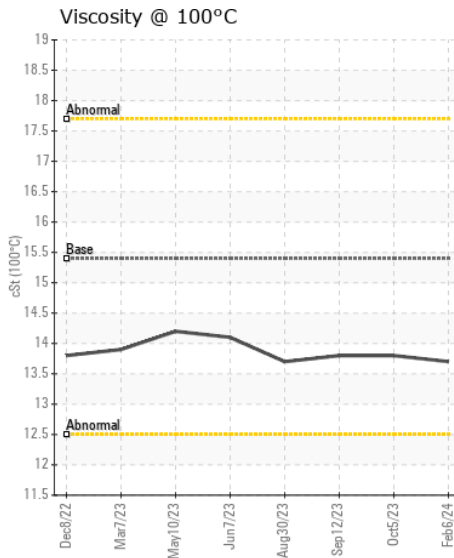
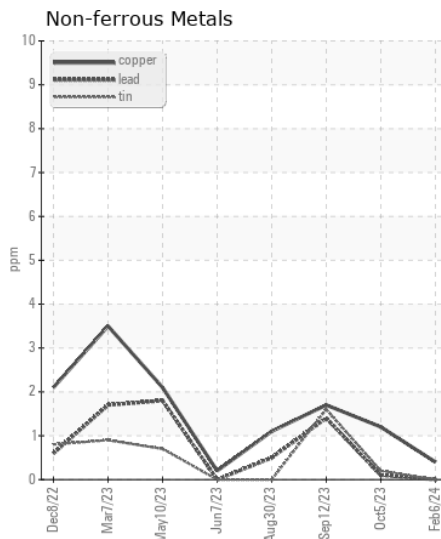
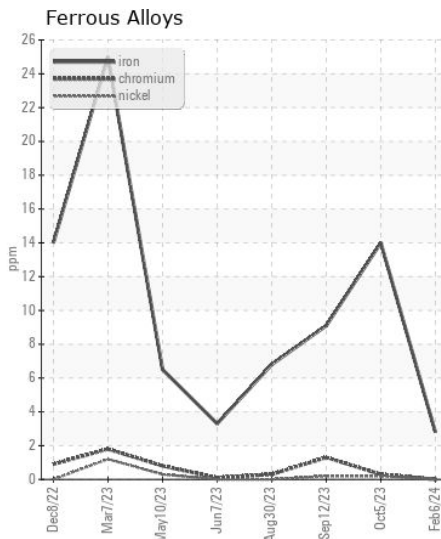
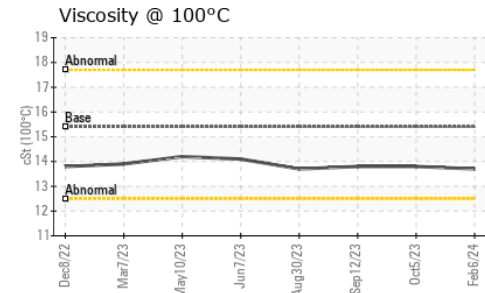
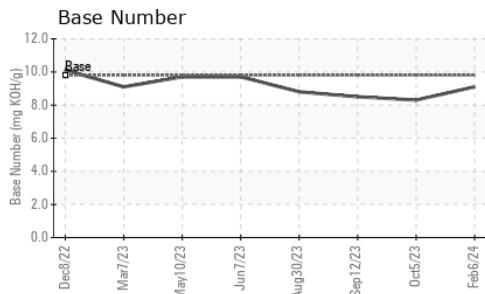
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>2</b>	4	3
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	5	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>0.1</b>	0.4	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>5.0</b>	7.3	6.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>17.3</b>	18.2	17.9
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>2</b>	1	2
Boron	ppm	ASTM D5185m	0	<b>6</b>	4	5
Barium	ppm	ASTM D5185m	0	<b>0</b>	<1	44
Molybdenum	ppm	ASTM D5185m	60	<b>63</b>	57	56
Manganese	ppm	ASTM D5185m	0	<b>0</b>	<1	1
Magnesium	ppm	ASTM D5185m	1010	<b>957</b>	840	884
Calcium	ppm	ASTM D5185m	1070	<b>1116</b>	1021	992
Phosphorus	ppm	ASTM D5185m	1150	<b>1038</b>	963	915
Zinc	ppm	ASTM D5185m	1270	<b>1302</b>	1149	1129
Sulfur	ppm	ASTM D5185m	2060	<b>3201</b>	2879	3200
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>13.1</b>	14.1	13.5
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>9.1</b>	8.3	8.5
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.7</b>	13.8	13.8



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0100899  
**Lab Number** : 06085595  
**Unique Number** : 10873040  
**Test Package** : FLEET

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

**GFL Environmental - 419 - Metro Saginaw**  
 6950 N Michigan  
 Saginaw, MI  
 US 48604

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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)