



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

Machine Id  
**429048-402450**

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>GFL0109843</b>	GFL0109838	GFL0103327
Sample Date		Client Info		<b>19 Feb 2024</b>	07 Feb 2024	18 Jan 2024
Machine Age	hrs	Client Info		<b>19371</b>	17301	17148
Oil Age	hrs	Client Info		<b>600</b>	0	0
Filter Age	hrs	Client Info		<b>600</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>Changed</b>	Not Changd	Not Changd
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>110	<b>23</b>	10	8
Chromium	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m	>2	<b>1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>6</b>	<1	1
Lead	ppm	ASTM D5185m	>45	<b>&lt;1</b>	0	2
Copper	ppm	ASTM D5185m	>85	<b>6</b>	0	<1
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

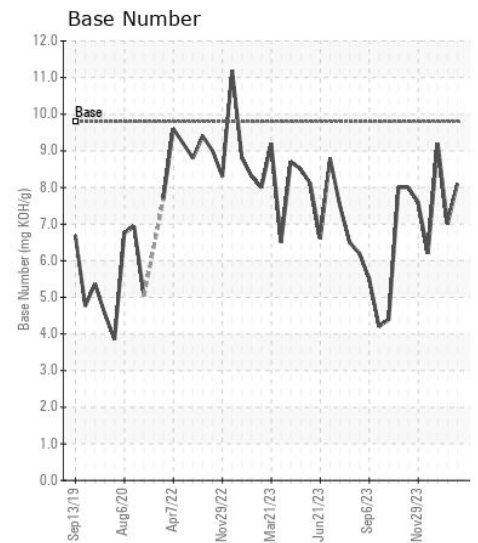
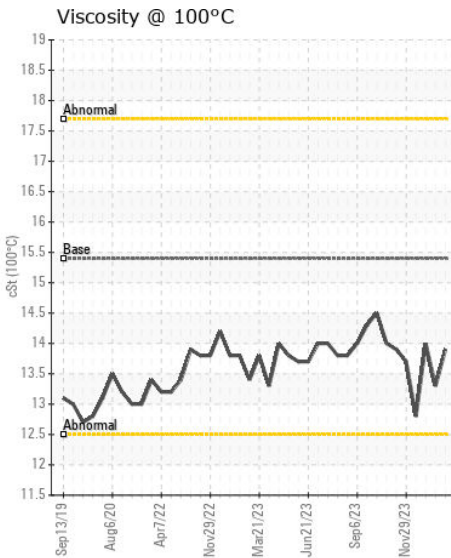
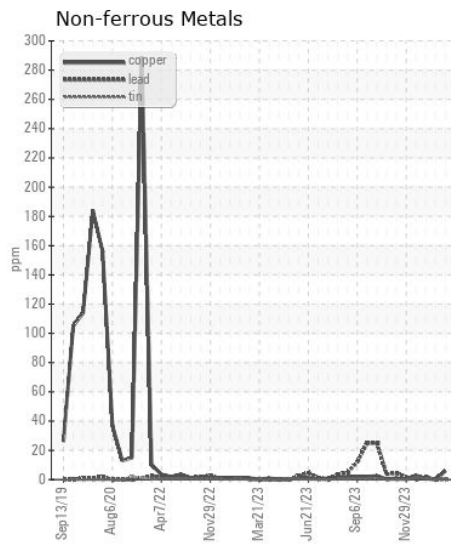
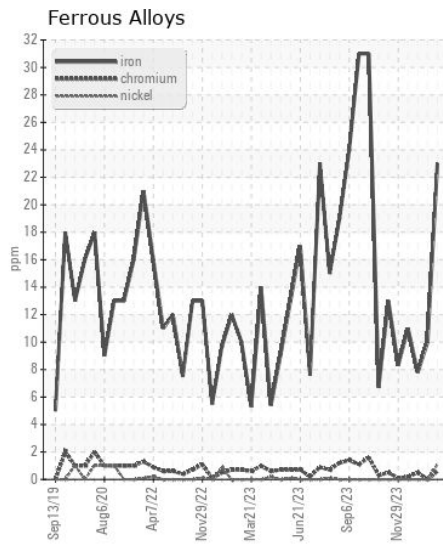
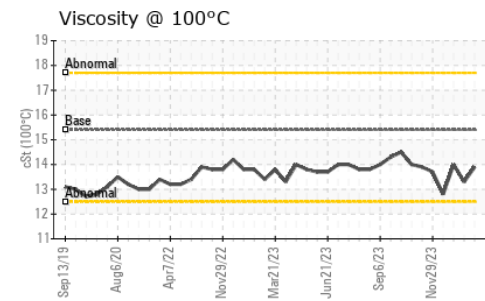
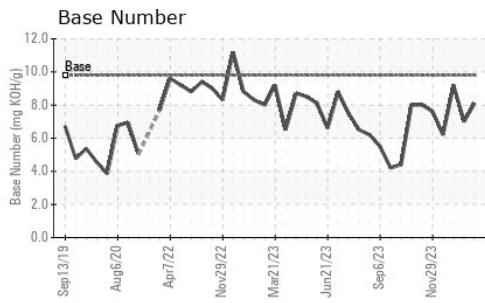
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>30	<b>7</b>	6	4
Potassium	ppm	ASTM D5185m	>20	<b>13</b>	1	0
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>0.4</b>	0.4	0.5
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.9</b>	8.9	5.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.1</b>	19.9	18.4
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>5</b>	3	29
Boron	ppm	ASTM D5185m	0	<b>6</b>	2	5
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>65</b>	58	61
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185m	1010	<b>985</b>	936	955
Calcium	ppm	ASTM D5185m	1070	<b>1161</b>	1175	1123
Phosphorus	ppm	ASTM D5185m	1150	<b>1087</b>	1039	1070
Zinc	ppm	ASTM D5185m	1270	<b>1318</b>	1235	1264
Sulfur	ppm	ASTM D5185m	2060	<b>3398</b>	3056	3294
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.7</b>	17.0	13.5
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.1</b>	7.0	9.2
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.9</b>	13.3	14.0



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0109843  
**Lab Number** : 06102809  
**Unique Number** : 10901039  
**Test Package** : FLEET

**Received** : 28 Feb 2024  
**Tested** : 29 Feb 2024  
**Diagnosed** : 29 Feb 2024 - Wes Davis

**GFL Environmental - 836 - Kansas City Hauling**  
 7801 East Truman Road  
 Kansas City, MO  
 US 64126  
 Contact: Loyce Stewart  
 loyce.stewart@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: