



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

Machine Id  
**CUMMINS 810030**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 15W40 (28 QTS)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0109039</b>	GFL0109083	GFL0109100
Sample Date		Client Info		<b>21 Feb 2024</b>	02 Feb 2024	11 Jan 2024
Machine Age	hrs	Client Info		<b>16113</b>	15987	15837
Oil Age	hrs	Client Info		<b>0</b>	10655	15837
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	MARGINAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>75	<b>14</b>	10	35
Chromium	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	1
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>15	<b>3</b>	2	5
Lead	ppm	ASTM D5185m	>25	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>100	<b>1</b>	<1	6
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

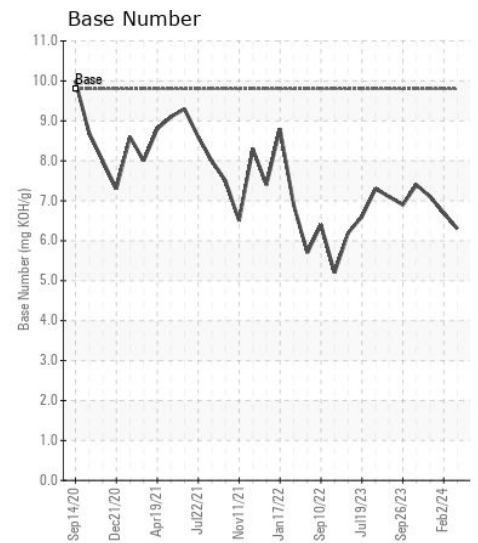
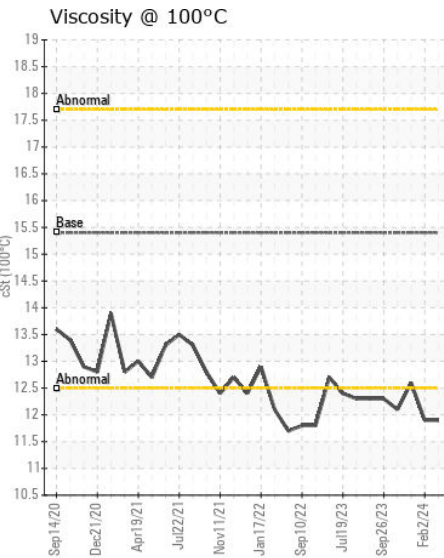
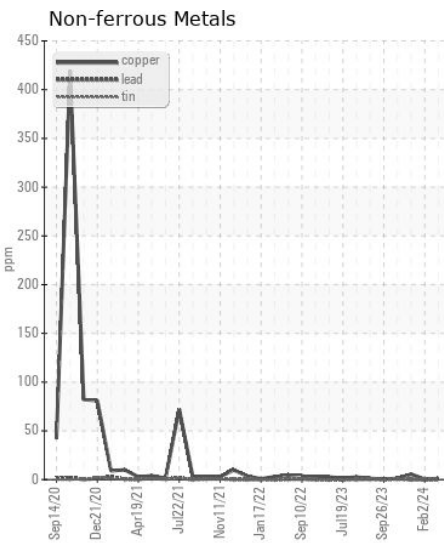
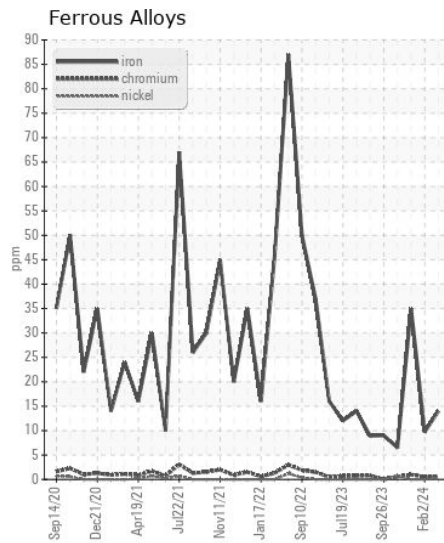
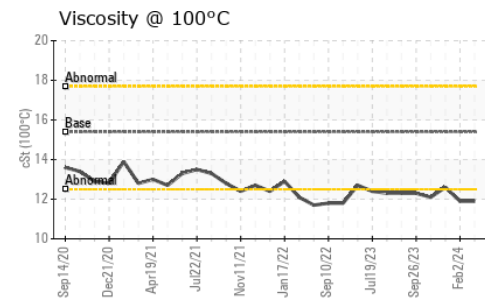
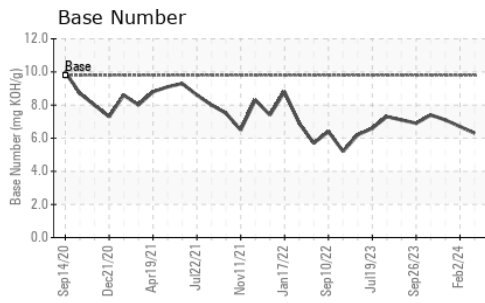
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>4</b>	3	9
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	2	2
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	▲ 2.1	<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>0.6</b>	0.5	0.8
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.4</b>	8.7	8.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.5</b>	18.6	18.3
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>5</b>	4	7
Boron	ppm	ASTM D5185m	0	<b>16</b>	16	16
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>57</b>	57	60
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	1
Magnesium	ppm	ASTM D5185m	1010	<b>688</b>	673	795
Calcium	ppm	ASTM D5185m	1070	<b>1033</b>	1048	1046
Phosphorus	ppm	ASTM D5185m	1150	<b>878</b>	878	957
Zinc	ppm	ASTM D5185m	1270	<b>1039</b>	1046	1132
Sulfur	ppm	ASTM D5185m	2060	<b>2489</b>	2594	2774
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.0</b>	14.9	13.5
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>6.3</b>	6.7	7.1
Visc @ 100°C	cSt	ASTM D445	15.4	<b>11.9</b>	11.9	12.6



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0109039  
**Lab Number** : 06098138  
**Unique Number** : 10896368  
**Test Package** : FLEET

**Received** : 23 Feb 2024  
**Tested** : 25 Feb 2024  
**Diagnosed** : 25 Feb 2024 - Wes Davis

**GFL Environmental - 009 - Fairburn**  
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 Fairburn, GA  
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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)