



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

Machine Id  
**CUMMINS 810030**

Component  
**Diesel Engine**

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

**RECOMMENDATION**

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0109083</b>	GFL0109100	GFL0109062
Sample Date		Client Info		<b>02 Feb 2024</b>	11 Jan 2024	05 Jan 2024
Machine Age	hrs	Client Info		<b>15987</b>	15837	15744
Oil Age	hrs	Client Info		<b>10655</b>	15837	15744
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>MARGINAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

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

**CONTAMINATION**

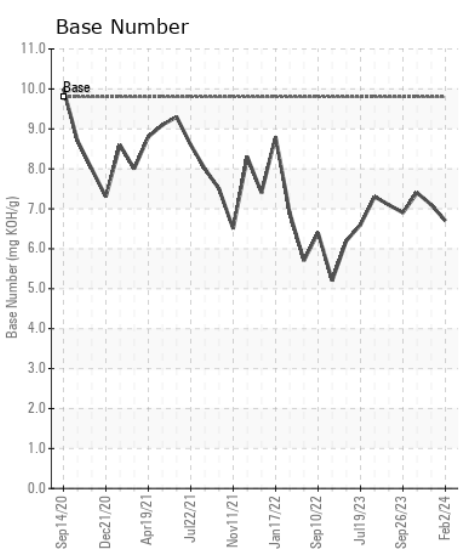
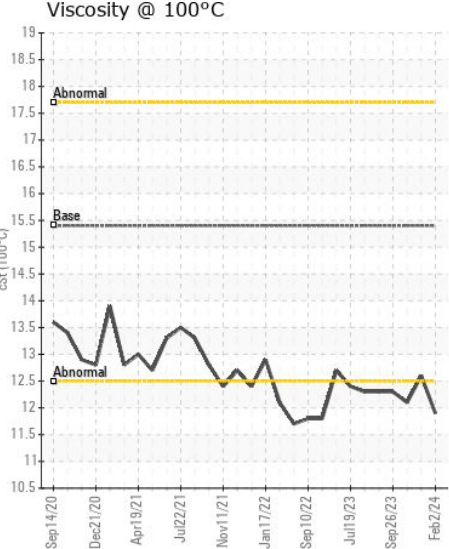
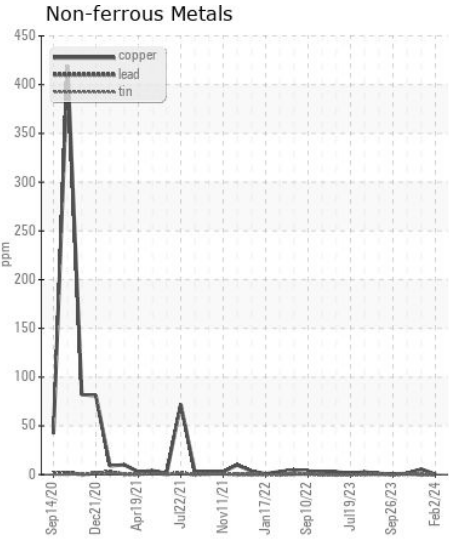
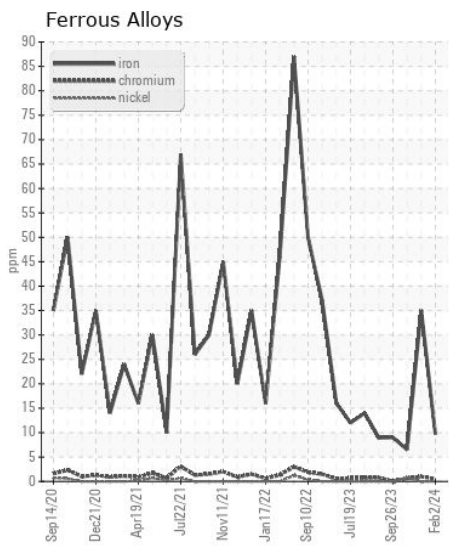
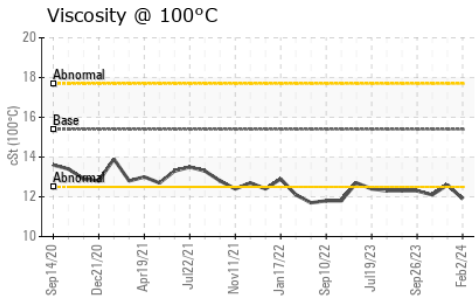
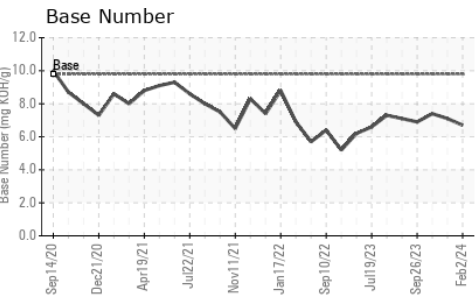
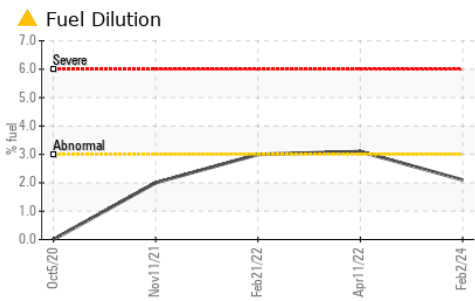
Light fuel dilution occurring. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>3</b>	9	4
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	2	3
Fuel	%	ASTM D3524	>3.0	<b>▲ 2.1</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	>6	<b>0.5</b>	0.8	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.7</b>	8.4	7.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.6</b>	18.3	17.7
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>4</b>	7	0
Boron	ppm	ASTM D5185m	0	<b>16</b>	16	19
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>57</b>	60	57
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>673</b>	795	704
Calcium	ppm	ASTM D5185m	1070	<b>1048</b>	1046	1097
Phosphorus	ppm	ASTM D5185m	1150	<b>878</b>	957	772
Zinc	ppm	ASTM D5185m	1270	<b>1046</b>	1132	1089
Sulfur	ppm	ASTM D5185m	2060	<b>2594</b>	2774	2862
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.9</b>	13.5	13.1
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>6.7</b>	7.1	7.4
Visc @ 100°C	cSt	ASTM D445	15.4	<b>11.9</b>	12.6	12.1



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0109083 **Received** : 09 Feb 2024  
**Lab Number** : 06084482 **Tested** : 13 Feb 2024  
**Unique Number** : 10871927 **Diagnosed** : 13 Feb 2024 - Wes Davis  
**Test Package** : FLEET ( Additional Tests: FuelDilution, PercentFuel )

**GFL Environmental - 009 - Fairburn**  
 6905 Roosevelt Hwy  
 Fairburn, GA  
 US 30213  
 Contact: Eric Jones  
 erjones@gflenv.com  
 T: (678)630-9927  
 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)