



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



Area  
**(YA122669) 020**  
Machine Id  
**2581**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (52 QTS)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0117859</b>	GFL0103793	GFL0103803
Sample Date		Client Info		<b>20 May 2024</b>	23 Feb 2024	30 Nov 2023
Machine Age	hrs	Client Info		<b>29763</b>	29328	28763
Oil Age	hrs	Client Info		<b>726</b>	726	726
Filter Age	hrs	Client Info		<b>726</b>	726	726
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	SEVERE	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>120	<b>34</b>	60	18
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	3	<1
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	1	<1
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>11</b>	3	2
Lead	ppm	ASTM D5185m	>40	<b>1</b>	4	0
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	4	8
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**

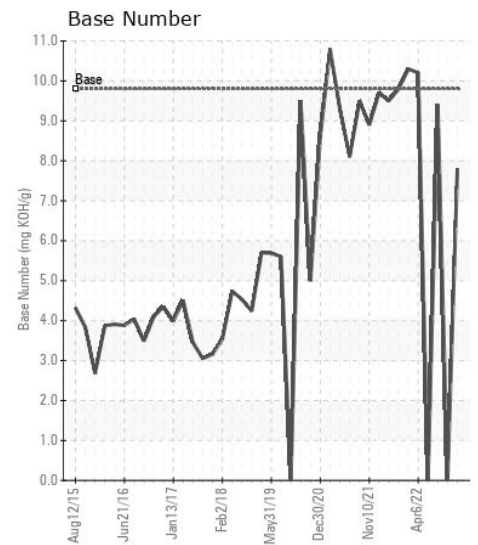
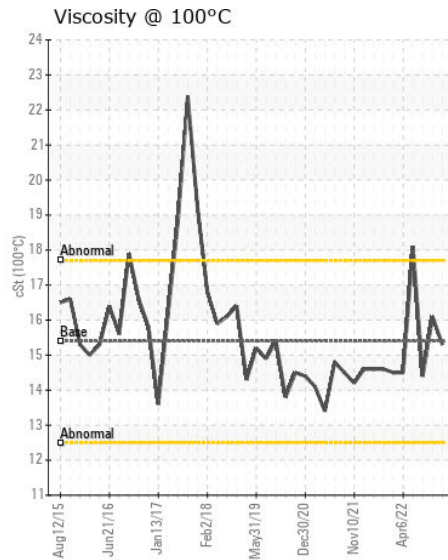
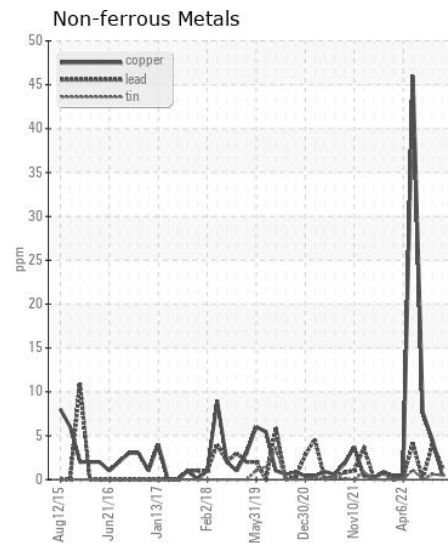
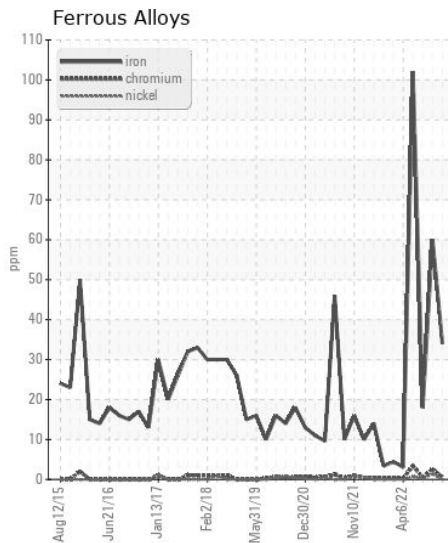
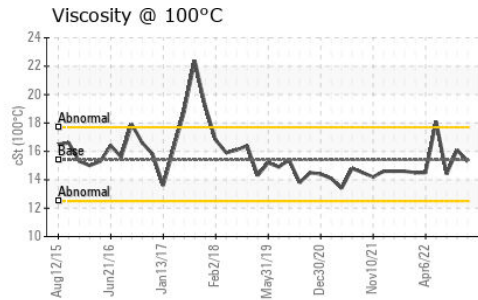
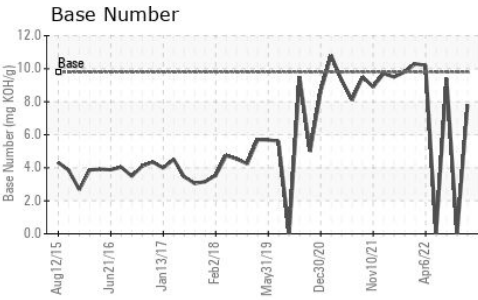
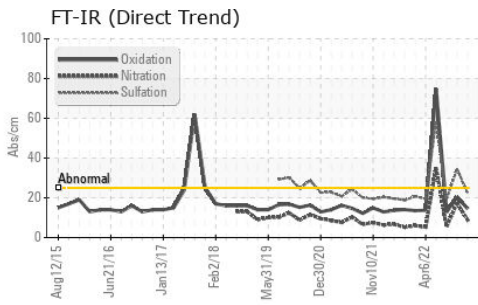
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>10</b>	8	4
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	<1
Fuel		WC Method	>3.0	<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	>4	<b>2.3</b>	▲ 6.9	1.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.8</b>	17.4	5.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.4</b>	34.5	19.3
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>2</b>	7	4
Boron	ppm	ASTM D5185m	0	<b>7</b>	5	6
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	2
Molybdenum	ppm	ASTM D5185m	60	<b>60</b>	60	55
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m	1010	<b>915</b>	942	821
Calcium	ppm	ASTM D5185m	1070	<b>1050</b>	1100	1028
Phosphorus	ppm	ASTM D5185m	1150	<b>949</b>	1011	884
Zinc	ppm	ASTM D5185m	1270	<b>1202</b>	1242	1094
Sulfur	ppm	ASTM D5185m	2060	<b>3207</b>	2953	4519
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.6</b>	20.3	12.9
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>7.8</b>	▲ 0.0	9.4
Visc @ 100°C	cSt	ASTM D445	15.4	<b>15.3</b>	16.1	14.4



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0117859  
**Lab Number** : 06188939  
**Unique Number** : 11045691  
**Test Package** : FLEET

**Received** : 23 May 2024  
**Tested** : 24 May 2024  
**Diagnosed** : 24 May 2024 - Wes Davis

**GFL Environmental - 020 - Alamance**  
 703 East Gilbreath St  
 Graham, NC  
 US 27253  
 Contact:

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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