



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

Area  
**GFL035**  
Machine Id  
**3774**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 15W40 (40 QTS)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0102345</b>	GFL0071584	GFL0061663
Sample Date		Client Info		<b>16 Feb 2024</b>	12 Apr 2023	05 Dec 2022
Machine Age	hrs	Client Info		<b>7659</b>	7659	7659
Oil Age	hrs	Client Info		<b>600</b>	600	600
Filter Age	hrs	Client Info		<b>0</b>	600	600
Oil Changed		Client Info		<b>Not Changd</b>	Changed	Changed
Filter Changed		Client Info		<b>N/A</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>165	<b>3</b>	12	6
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>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	<1	0
Lead	ppm	ASTM D5185m	>150	<b>0</b>	2	<1
Copper	ppm	ASTM D5185m	>90	<b>&lt;1</b>	<1	0
Tin	ppm	ASTM D5185m	>5	<b>0</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**

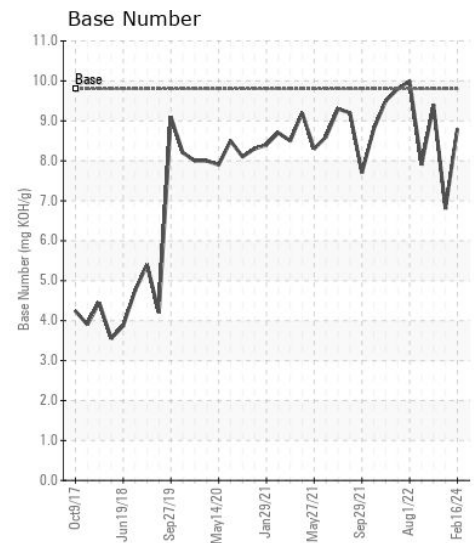
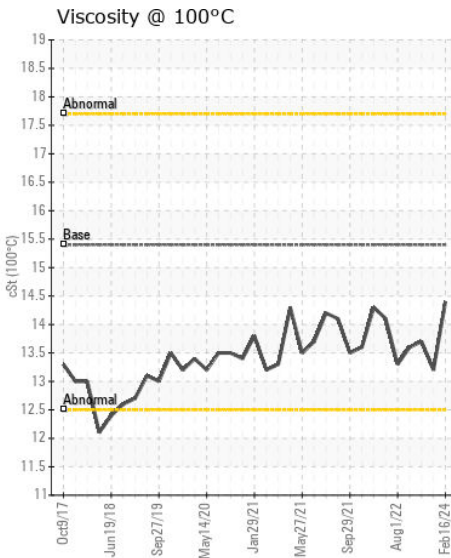
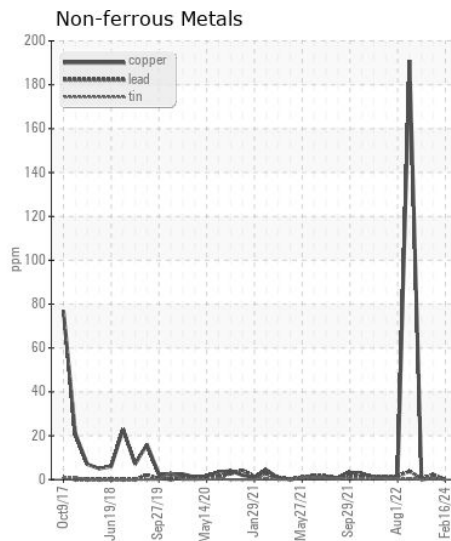
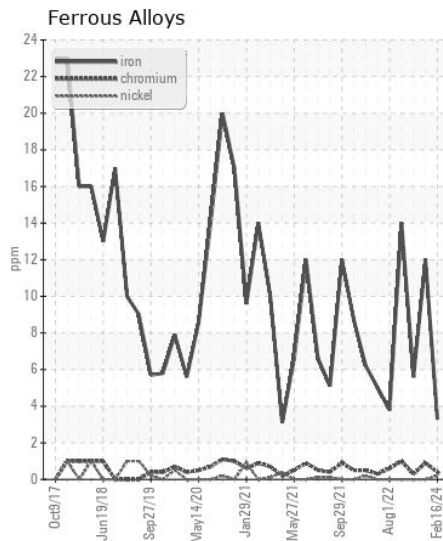
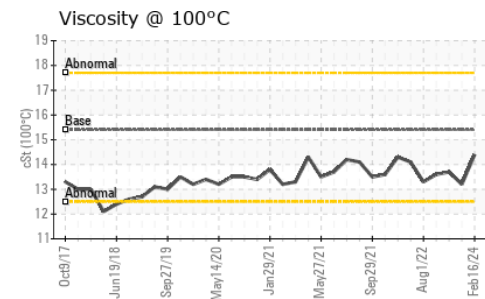
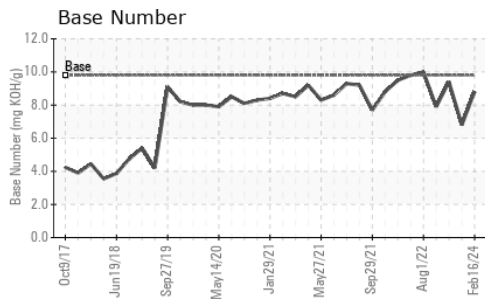
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>35	<b>4</b>	16	7
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	>7.5	<b>0.1</b>	0.3	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>5.5</b>	8.3	6.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.0</b>	18.4	20.0
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>	2	1
Boron	ppm	ASTM D5185m	0	<b>2</b>	8	16
Barium	ppm	ASTM D5185m	0	<b>0</b>	2	0
Molybdenum	ppm	ASTM D5185m	60	<b>60</b>	64	65
Manganese	ppm	ASTM D5185m	0	<b>0</b>	<1	0
Magnesium	ppm	ASTM D5185m	1010	<b>993</b>	867	878
Calcium	ppm	ASTM D5185m	1070	<b>1063</b>	1119	1233
Phosphorus	ppm	ASTM D5185m	1150	<b>1117</b>	987	1072
Zinc	ppm	ASTM D5185m	1270	<b>1319</b>	1208	1277
Sulfur	ppm	ASTM D5185m	2060	<b>3733</b>	2836	3552
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>13.6</b>	15.4	14.8
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.8</b>	6.8	9.4
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.4</b>	13.2	13.7



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0102345  
**Lab Number** : 06104802  
**Unique Number** : 10903032  
**Test Package** : FLEET

**Received** : 29 Feb 2024  
**Tested** : 01 Mar 2024  
**Diagnosed** : 01 Mar 2024 - Wes Davis

**GFL Environmental - 035 - Greensboro**  
 1236 Elon Place  
 High Point, NC  
 US 27263  
 Contact: JORGE COSTA  
 jorge.costa@gflenv.com  
 T: (336)668-3712  
 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)