



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

Area  
**(YA141229) GFL035**

Machine Id  
**3792**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 15W40 (38 QTS)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0102359</b>	GFL0102292	GFL0071614
Sample Date		Client Info		<b>07 Feb 2024</b>	17 Nov 2023	30 Aug 2023
Machine Age	hrs	Client Info		<b>0</b>	7176	7176
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	ABNORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>165	<b>13</b>	5	22
Chromium	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	1	2
Lead	ppm	ASTM D5185m	>150	<b>&lt;1</b>	<1	4
Copper	ppm	ASTM D5185m	>90	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185m	>5	<b>1</b>	0	<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**

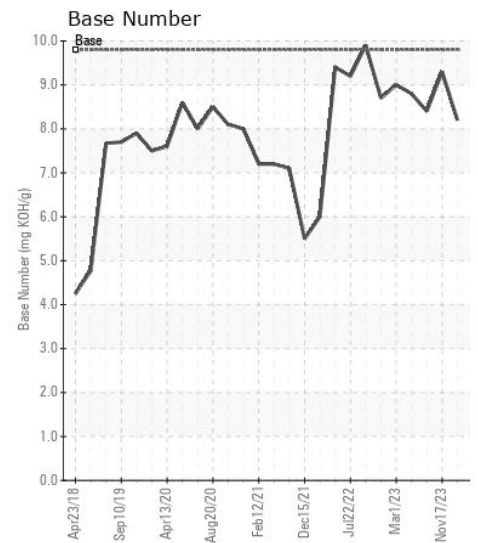
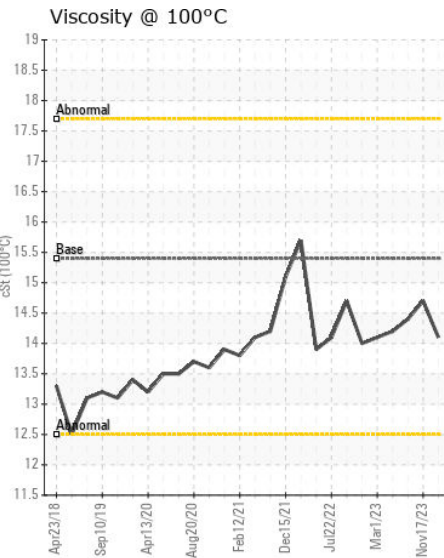
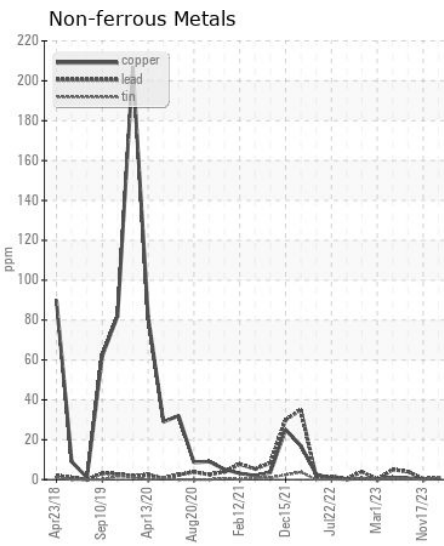
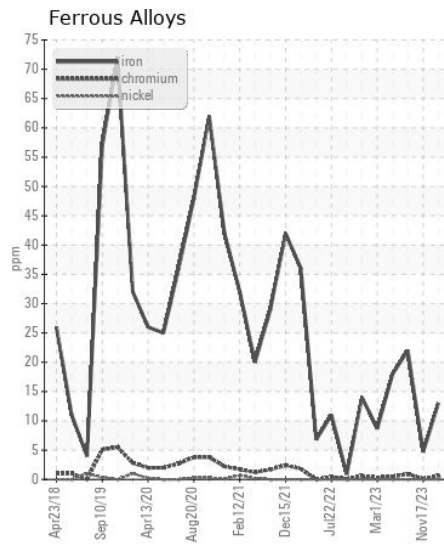
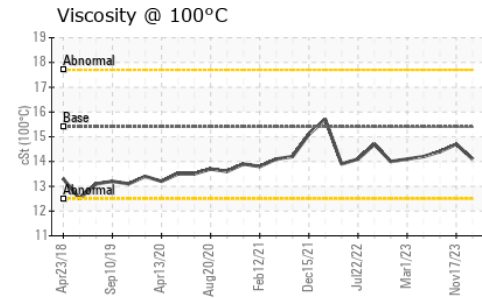
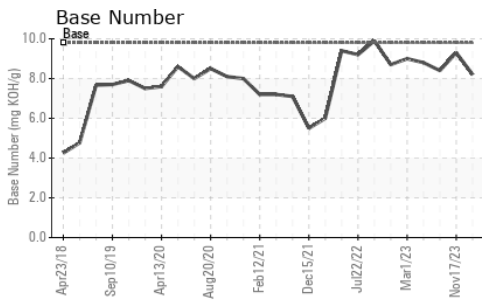
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>35	<b>6</b>	6	19
Potassium	ppm	ASTM D5185m	>20	<b>10</b>	9	▲ 347
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>	0.0	▲ 0.06
Soot %	%	*ASTM D7844	>7.5	<b>0.8</b>	0.2	0.9
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.4</b>	5.5	12.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>23.3</b>	18.6	25.5
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>	2	▲ 53
Boron	ppm	ASTM D5185m	0	<b>2</b>	4	4
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>65</b>	62	66
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m	1010	<b>1030</b>	920	944
Calcium	ppm	ASTM D5185m	1070	<b>1174</b>	1087	1146
Phosphorus	ppm	ASTM D5185m	1150	<b>1117</b>	991	1059
Zinc	ppm	ASTM D5185m	1270	<b>1361</b>	1209	1261
Sulfur	ppm	ASTM D5185m	2060	<b>3245</b>	3297	3015
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>19.5</b>	14.2	21.7
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.2</b>	9.3	8.4
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.1</b>	14.7	14.4



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0102359  
**Lab Number** : 06084283  
**Unique Number** : 10871728  
**Test Package** : FLEET

**Received** : 08 Feb 2024  
**Tested** : 09 Feb 2024  
**Diagnosed** : 09 Feb 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)