



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



Area  
**GFL035**  
Machine Id  
**2453**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (11 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0116416</b>	GFL0102362	GFL0085155
Sample Date		Client Info		<b>12 Apr 2024</b>	07 Feb 2024	09 Nov 2023
Machine Age	hrs	Client Info		<b>0</b>	0	387314
Oil Age	hrs	Client Info		<b>600</b>	600	600
Filter Age	hrs	Client Info		<b>0</b>	0	600
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Changed
Filter Changed		Client Info		<b>N/A</b>	N/A	Changed
Sample Status				<b>NORMAL</b>	ABNORMAL	SEVERE

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>120	<b>35</b>	79	▲ 134
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	2	4
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	2	4
Lead	ppm	ASTM D5185m	>40	<b>0</b>	1	4
Copper	ppm	ASTM D5185m	>330	<b>11</b>	8	14
Tin	ppm	ASTM D5185m	>15	<b>1</b>	2	3
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**

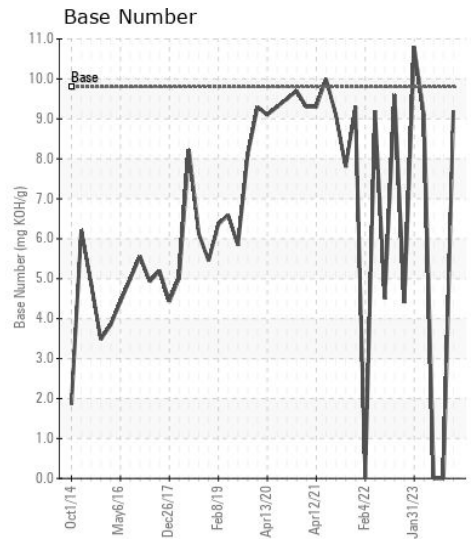
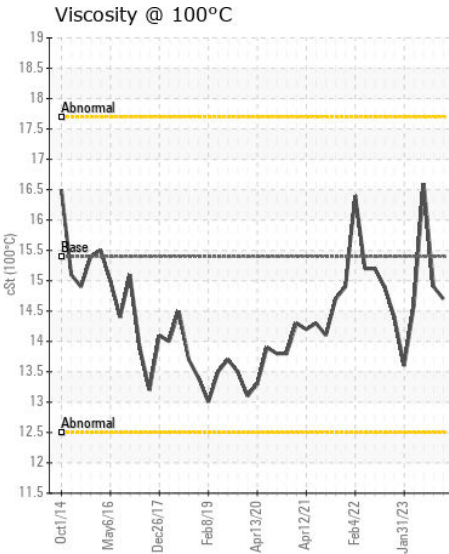
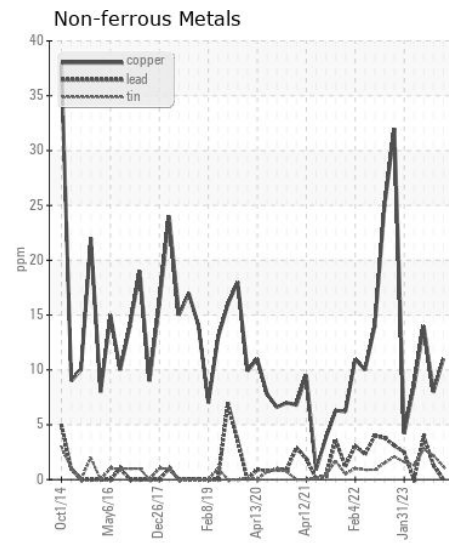
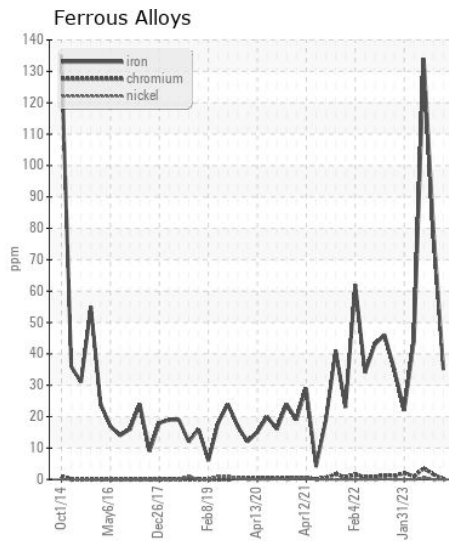
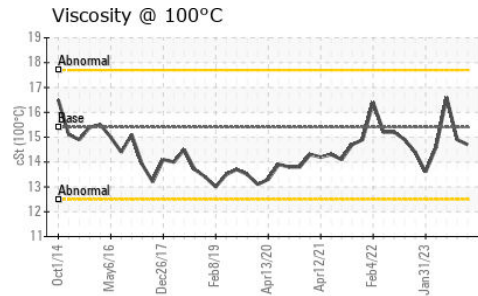
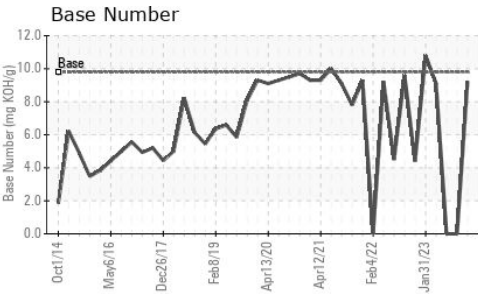
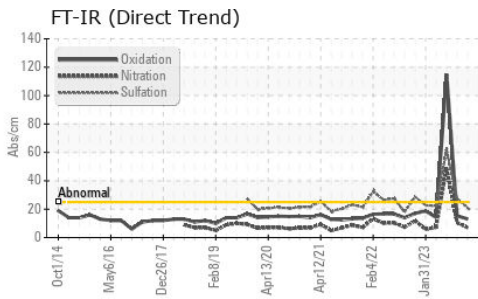
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>4</b>	4	8
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	<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>2.2</b>	▲ 4.7	▲ 8
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.9</b>	10.5	49.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.9</b>	27.5	61.8
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>&lt;1</b>	1	1
Boron	ppm	ASTM D5185m	0	<b>2</b>	5	2
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>62</b>	60	60
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	2
Magnesium	ppm	ASTM D5185m	1010	<b>973</b>	903	899
Calcium	ppm	ASTM D5185m	1070	<b>1107</b>	1121	1066
Phosphorus	ppm	ASTM D5185m	1150	<b>1124</b>	1004	1029
Zinc	ppm	ASTM D5185m	1270	<b>1303</b>	1243	1225
Sulfur	ppm	ASTM D5185m	2060	<b>3711</b>	2973	2554
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>13.1</b>	15.3	114.8
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>9.2</b>	▲ 0.0	▲ 0.0
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.7</b>	14.9	▲ 16.6



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0116416  
**Lab Number** : 06150028  
**Unique Number** : 10980106  
**Test Package** : FLEET  
**Received** : 16 Apr 2024  
**Tested** : 17 Apr 2024  
**Diagnosed** : 17 Apr 2024 - Wes Davis

**GFL Environmental - 035 - Greensboro**  
 1236 Elon Place  
 High Point, NC  
 US 27263  
 Contact: JORGE COSTA  
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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)