



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



Area  
**(YA110716)**  
Machine Id  
**2405**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (50 QTS)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0112893</b>	GFL0088512	GFL0098093
Sample Date		Client Info		<b>12 Apr 2024</b>	19 Feb 2024	01 Nov 2023
Machine Age	mls	Client Info		<b>136575</b>	136575	136575
Oil Age	mls	Client Info		<b>311</b>	155	330
Filter Age	mls	Client Info		<b>0</b>	155	0
Oil Changed		Client Info		<b>N/A</b>	Not Changd	N/A
Filter Changed		Client Info		<b>N/A</b>	Not Changd	N/A
Sample Status				<b>NORMAL</b>	NORMAL	MARGINAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>80	<b>11</b>	7	6
Chromium	ppm	ASTM D5185m	>6	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	<1	<1
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>6</b>	4	3
Lead	ppm	ASTM D5185m	>95	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>85	<b>3</b>	<1	<1
Tin	ppm	ASTM D5185m	>9	<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**

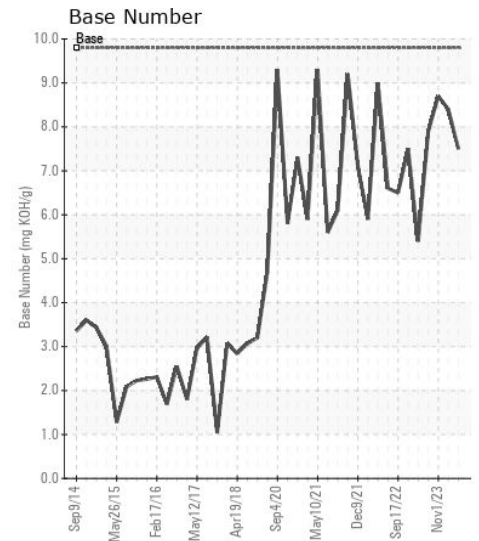
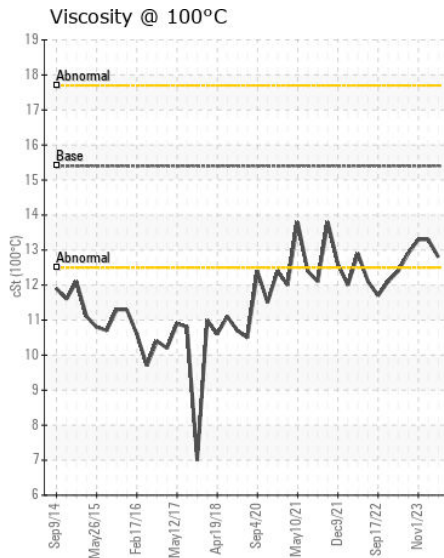
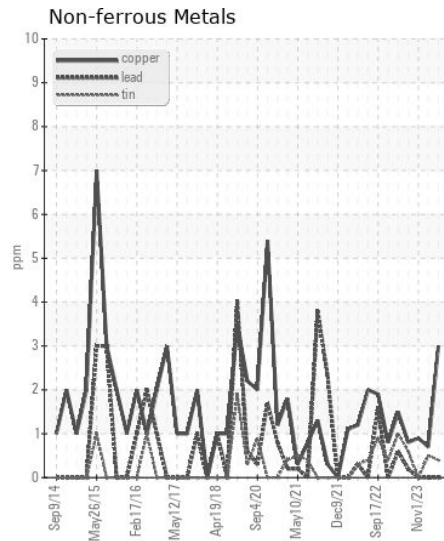
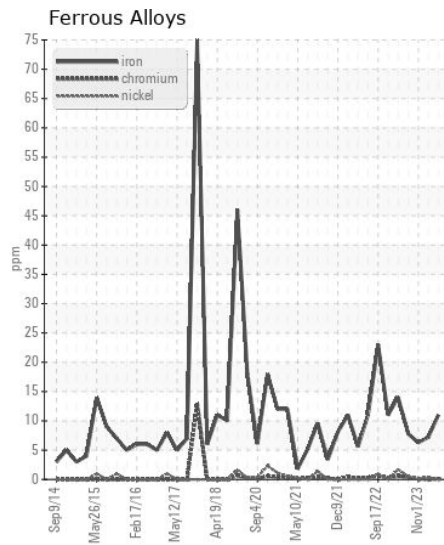
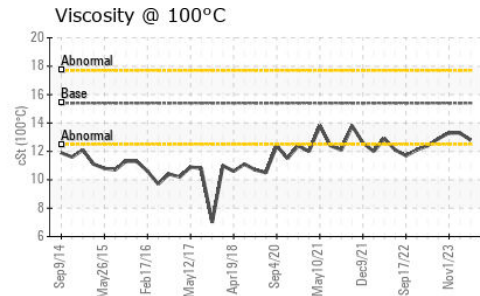
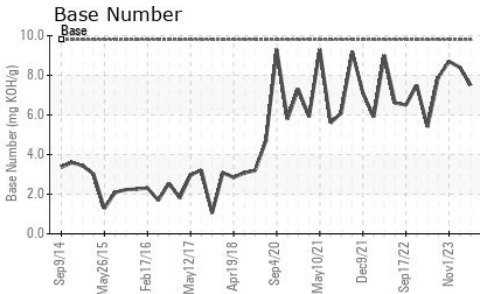
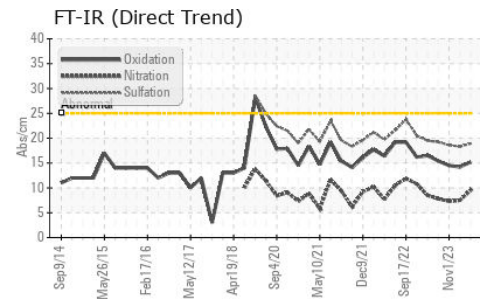
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>8</b>	5	4
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	5	4
Fuel		WC Method	>4.0	<b>&lt;1.0</b>	<1.0	▲ 3.0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844		<b>0.6</b>	0.5	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.5</b>	7.5	7.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.9</b>	18.3	18.6
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	>0.1	<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>8</b>	5	0
Boron	ppm	ASTM D5185m	0	<b>3</b>	2	5
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>57</b>	55	61
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m	1010	<b>941</b>	894	910
Calcium	ppm	ASTM D5185m	1070	<b>1085</b>	993	1158
Phosphorus	ppm	ASTM D5185m	1150	<b>1056</b>	1039	959
Zinc	ppm	ASTM D5185m	1270	<b>1281</b>	1189	1258
Sulfur	ppm	ASTM D5185m	2060	<b>3549</b>	2979	3503
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.2</b>	14.2	14.5
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>7.5</b>	8.4	8.7
Visc @ 100°C	cSt	ASTM D445	15.4	<b>12.8</b>	13.3	13.3



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0112893  
**Lab Number** : 06149304  
**Unique Number** : 10979382  
**Test Package** : FLEET

**Received** : 15 Apr 2024  
**Tested** : 16 Apr 2024  
**Diagnosed** : 16 Apr 2024 - Wes Davis

**GFL Environmental - 017 - Durham**  
 148 Stone Park Court  
 Durham, NC  
 US 27703

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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)