



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

Machine Id  
**920080-205317**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor. ( Customer Sample  
Comment: Engine oil sample )

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0114454</b>	GFL0100461	GFL0093274
Sample Date		Client Info		<b>11 Mar 2024</b>	28 Nov 2023	23 Sep 2023
Machine Age	mls	Client Info		<b>150697</b>	145306	139964
Oil Age	mls	Client Info		<b>150697</b>	145306	139964
Filter Age	mls	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Changd</b>	Changed	Changed
Filter Changed		Client Info		<b>Not Changd</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>12</b>	10	25
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	2
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>3</b>	2	4
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185m	>15	<b>&lt;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**

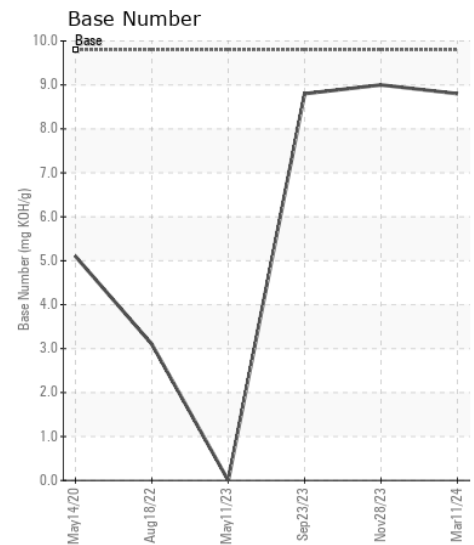
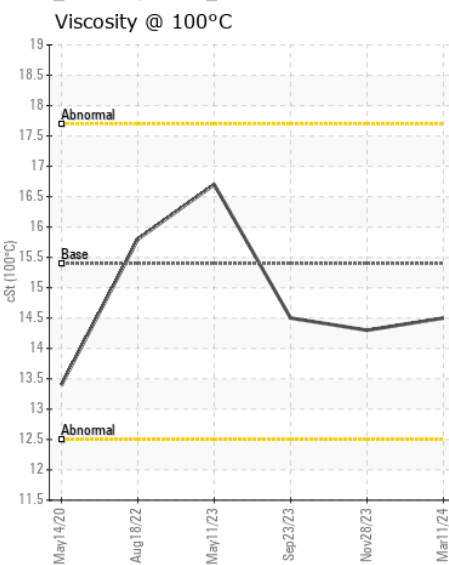
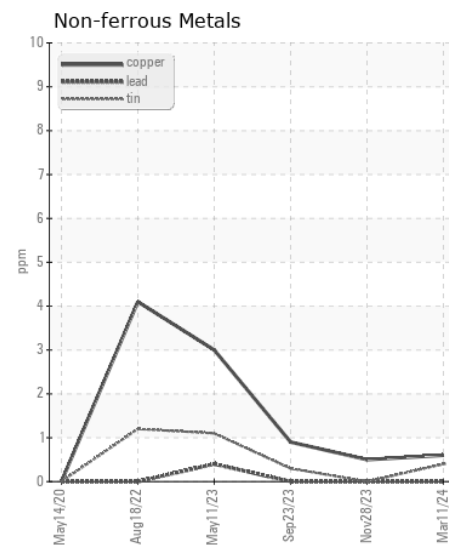
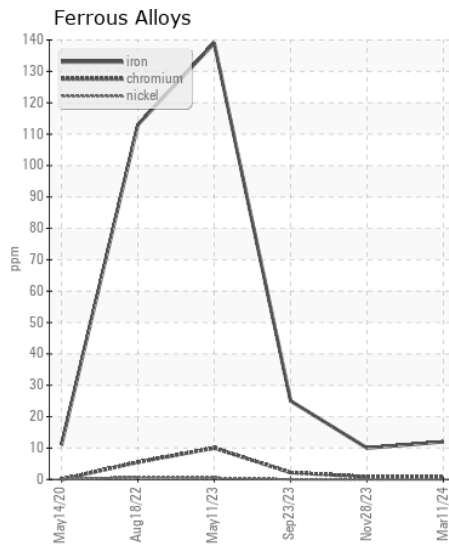
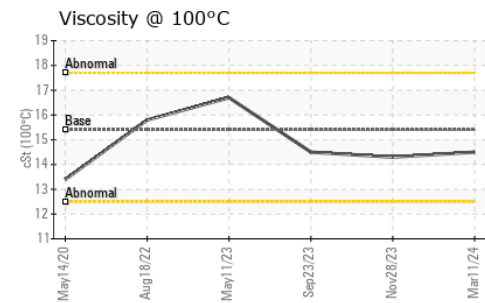
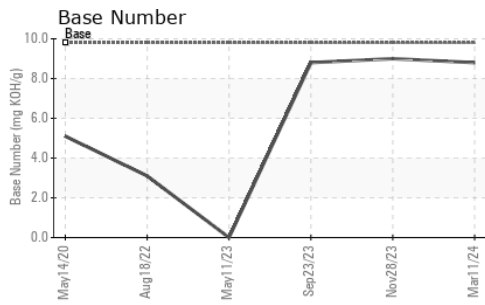
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>4</b>	3	4
Potassium	ppm	ASTM D5185m	>20	<b>5</b>	5	6
Fuel		WC Method	>5	<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	>3	<b>0.8</b>	0.7	1
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.7</b>	7.6	8.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.2</b>	19.7	20.3
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>1</b>	2	4
Boron	ppm	ASTM D5185m	0	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	0	<b>2</b>	2	0
Molybdenum	ppm	ASTM D5185m	60	<b>63</b>	55	64
Manganese	ppm	ASTM D5185m	0	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m	1010	<b>947</b>	853	889
Calcium	ppm	ASTM D5185m	1070	<b>1130</b>	1017	1052
Phosphorus	ppm	ASTM D5185m	1150	<b>934</b>	897	994
Zinc	ppm	ASTM D5185m	1270	<b>1232</b>	1119	1217
Sulfur	ppm	ASTM D5185m	2060	<b>3208</b>	4506	3455
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.6</b>	14.8	16.3
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.8</b>	9.0	8.8
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.5</b>	14.3	14.5



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0114454  
**Lab Number** : 06125403  
**Unique Number** : 10939554  
**Test Package** : FLEET

**Received** : 21 Mar 2024  
**Tested** : 22 Mar 2024  
**Diagnosed** : 25 Mar 2024 - Don Baldrige

**GFL Environmental - 865 - East Mount Hauling**  
 7213 East Mount Houston Road  
 Houston, TX  
 US 77050  
 Contact: Saul Castillo  
 saul.castillo@gflenv.com

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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F: