



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

Machine Id  
**527043**

Component  
**Diesel Engine**

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

**RECOMMENDATION**

Resample at the next service interval to monitor. ( Customer Sample  
Comment: Service completed at 19817 hours. Sample only17 )

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0101652</b>	GFL0094862	GFL0088262
Sample Date		Client Info		<b>13 Mar 2024</b>	06 Nov 2023	17 Aug 2023
Machine Age	hrs	Client Info		<b>19868</b>	19062	18652
Oil Age	hrs	Client Info		<b>51</b>	409	277
Filter Age	hrs	Client Info		<b>51</b>	409	277
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Changed
Filter Changed		Client Info		<b>Not Changd</b>	Not Changd	Changed
Sample Status				<b>NORMAL</b>	NORMAL	ABNORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>12</b>	43	24
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	<1	1
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	4	4
Copper	ppm	ASTM D5185m	>330	<b>6</b>	240	▲ 462
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

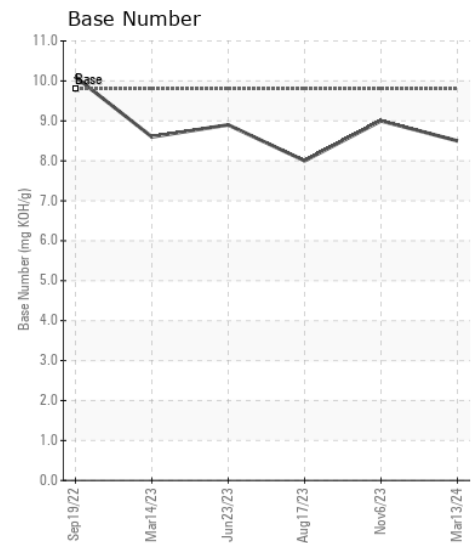
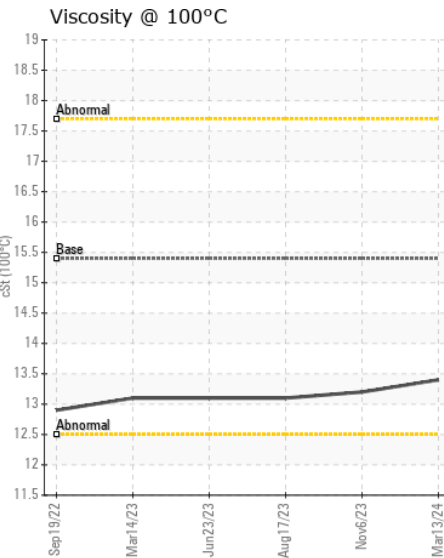
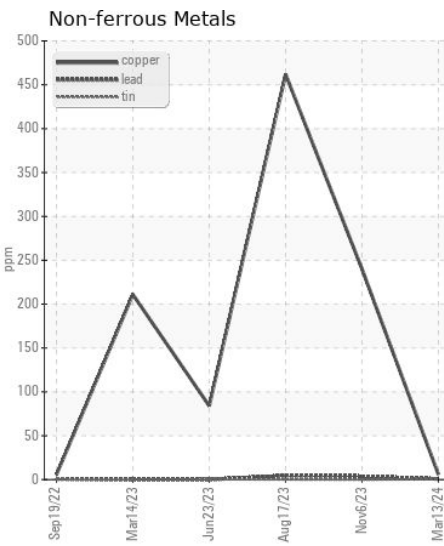
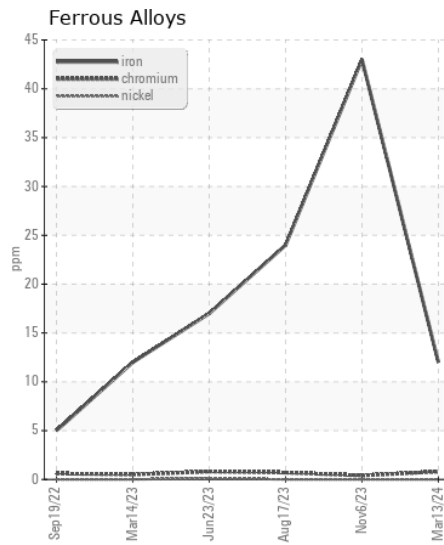
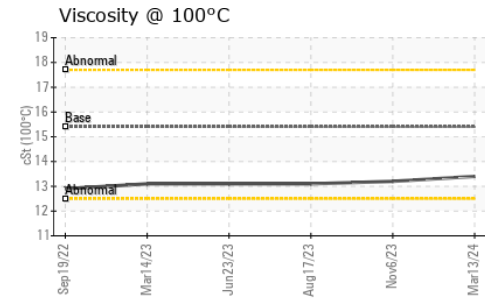
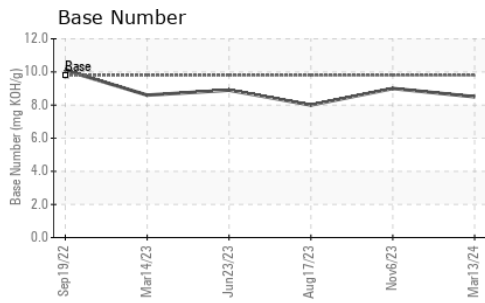
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>4</b>	9	4
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	<1
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>0.1</b>	0.4	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>5.8</b>	9.1	8.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>17.7</b>	22.3	19.1
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	2
Boron	ppm	ASTM D5185m	0	<b>7</b>	26	11
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>65</b>	51	53
Manganese	ppm	ASTM D5185m	0	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m	1010	<b>946</b>	650	913
Calcium	ppm	ASTM D5185m	1070	<b>1120</b>	1736	1135
Phosphorus	ppm	ASTM D5185m	1150	<b>1077</b>	1001	926
Zinc	ppm	ASTM D5185m	1270	<b>1226</b>	1255	1146
Sulfur	ppm	ASTM D5185m	2060	<b>3366</b>	2844	3232
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>13.8</b>	20.7	15.6
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.5</b>	9.0	8.0
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.4</b>	13.2	13.1



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0101652  
**Lab Number** : 06121509  
**Unique Number** : 10930342  
**Test Package** : FLEET

**Received** : 18 Mar 2024  
**Tested** : 19 Mar 2024  
**Diagnosed** : 21 Mar 2024 - Jonathan Hester

**GFL Environmental - 625 - Harrison Hauling**  
 4102 Industrial Pkwy  
 Harrison, MI  
 US 48625  
 Contact: Glenda Standen  
 gstanden@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)

T:  
F: