



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

Machine Id  
**726039-361627**

Component  
**Diesel Engine**

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

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0106844</b>	GFL0092030	GFL0092095
Sample Date		Client Info		<b>26 Feb 2024</b>	04 Dec 2023	02 Dec 2023
Machine Age	hrs	Client Info		<b>22744</b>	22229	358869
Oil Age	hrs	Client Info		<b>0</b>	600	124268
Filter Age	hrs	Client Info		<b>0</b>	600	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Not Changd
Filter Changed		Client Info		<b>Changed</b>	Changed	Not Changd
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>110	<b>17</b>	10	27
Chromium	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>2</b>	2	2
Lead	ppm	ASTM D5185m	>45	<b>&lt;1</b>	2	<1
Copper	ppm	ASTM D5185m	>85	<b>13</b>	16	15
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	0
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**

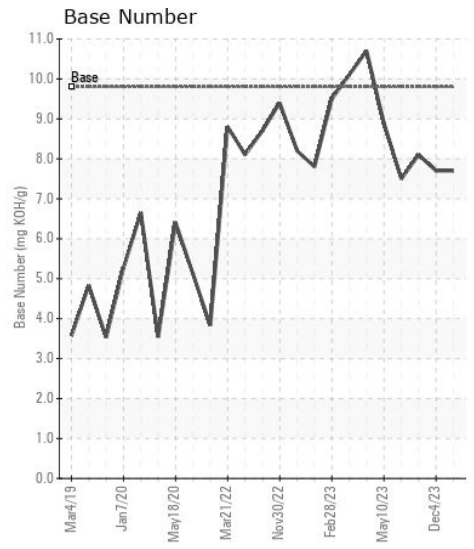
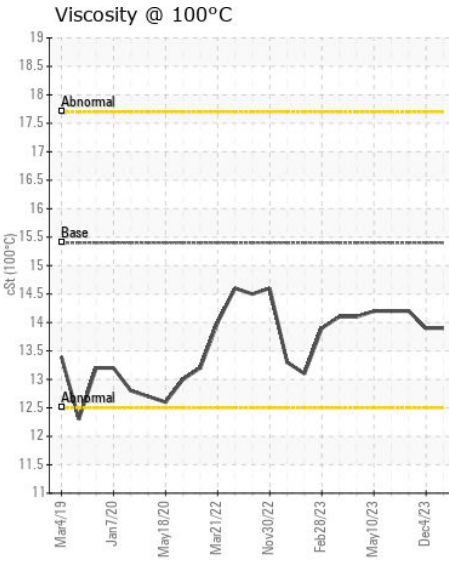
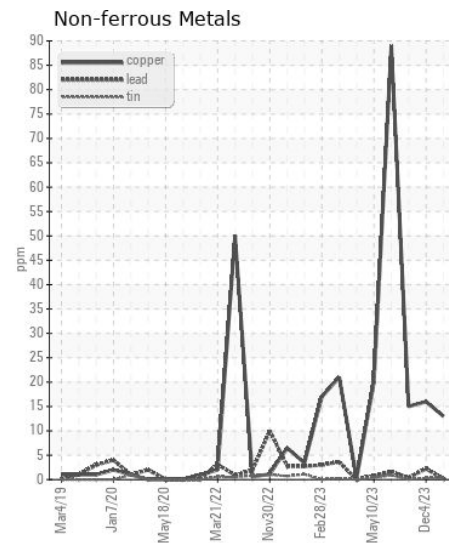
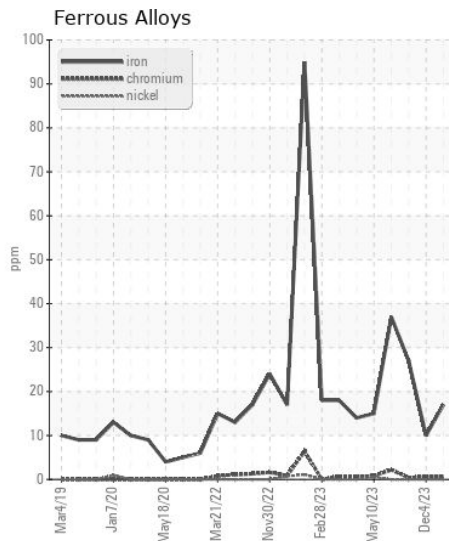
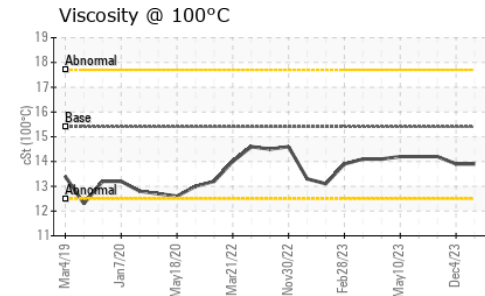
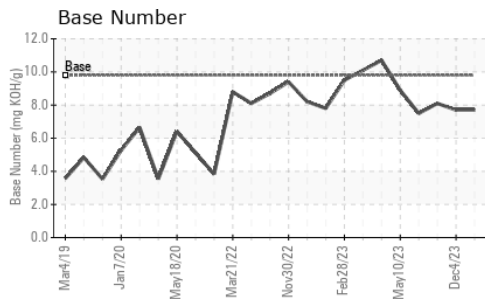
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>30	<b>5</b>	4	7
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	9	4
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>0.9</b>	0.7	0.8
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.8</b>	9.8	10.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.5</b>	22.2	22.8
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>8</b>	8	9
Boron	ppm	ASTM D5185m	0	<b>2</b>	<1	<1
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	2
Molybdenum	ppm	ASTM D5185m	60	<b>65</b>	43	62
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m	1010	<b>1008</b>	751	935
Calcium	ppm	ASTM D5185m	1070	<b>1119</b>	740	1110
Phosphorus	ppm	ASTM D5185m	1150	<b>1121</b>	703	979
Zinc	ppm	ASTM D5185m	1270	<b>1330</b>	918	1209
Sulfur	ppm	ASTM D5185m	2060	<b>3012</b>	1943	2829
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.9</b>	18.6	19.5
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>7.7</b>	7.7	8.1
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.9</b>	13.9	14.2



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0106844  
**Lab Number** : 06103485  
**Unique Number** : 10901715  
**Test Package** : FLEET  
**Received** : 28 Feb 2024  
**Tested** : 01 Mar 2024  
**Diagnosed** : 01 Mar 2024 - Wes Davis

**GFL Environmental - 856 - Houston South**  
 8515 Highway 6 South  
 Houston, TX  
 US 77083  
 Contact: Apolinar Zacarias  
 pzacariascano@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)