



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



Machine Id  
**727109-36**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (--- LTR)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0070962</b>	GFL0058061	GFL0058063
Sample Date		Client Info		<b>19 Mar 2024</b>	12 Mar 2024	03 Jan 2024
Machine Age	hrs	Client Info		<b>60</b>	11800	11686
Oil Age	hrs	Client Info		<b>60</b>	50	411
Filter Age	hrs	Client Info		<b>60</b>	50	411
Oil Changed		Client Info		<b>Not Changd</b>	Changed	Not Changd
Filter Changed		Client Info		<b>Not Changd</b>	Changed	Not Changd
Sample Status				<b>NORMAL</b>	NORMAL	SEVERE

**WEAR**

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>80	<b>17</b>	15	31
Chromium	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	2
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	2
Titanium	ppm	ASTM D5185m		<b>0</b>	0	2
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>30	<b>7</b>	7	8
Lead	ppm	ASTM D5185m	>30	<b>0</b>	0	5
Copper	ppm	ASTM D5185m	>150	<b>&lt;1</b>	0	128
Tin	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	2
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**

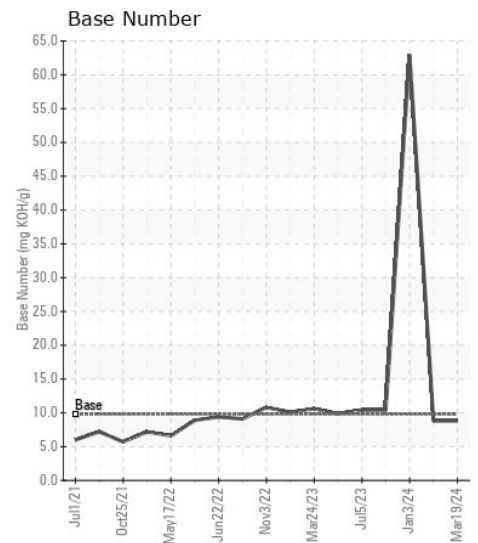
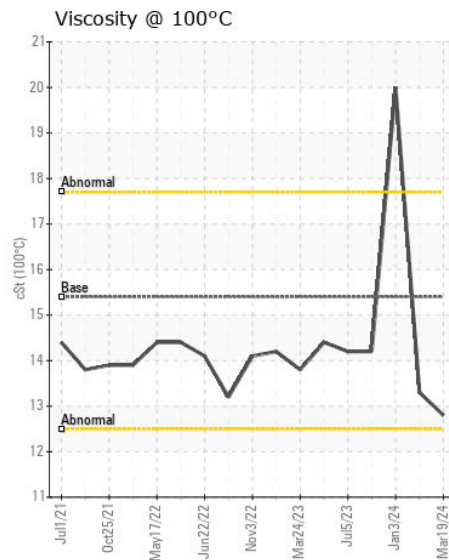
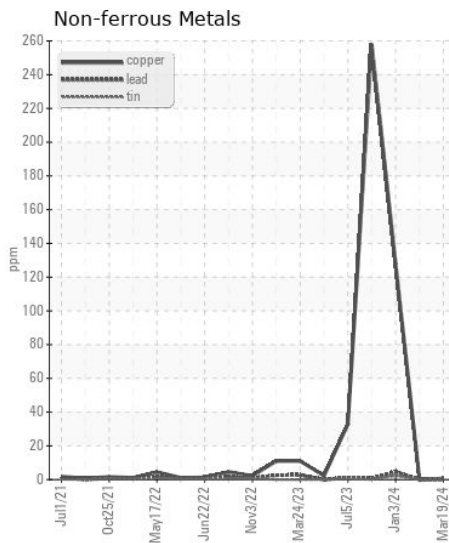
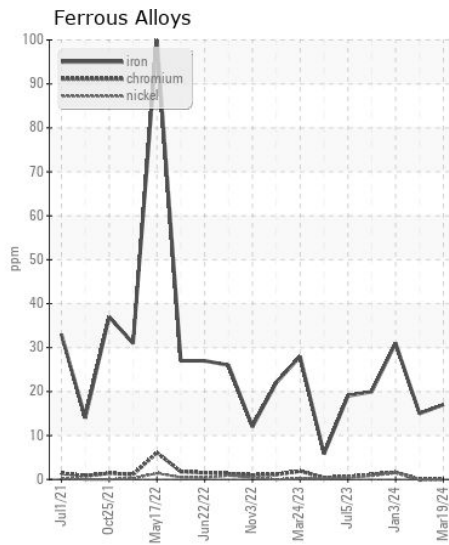
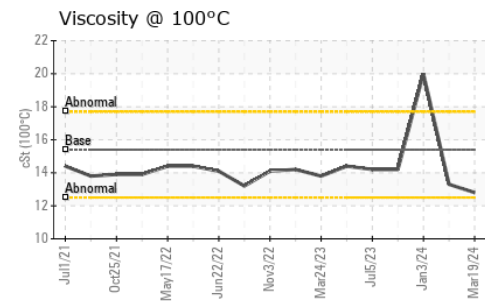
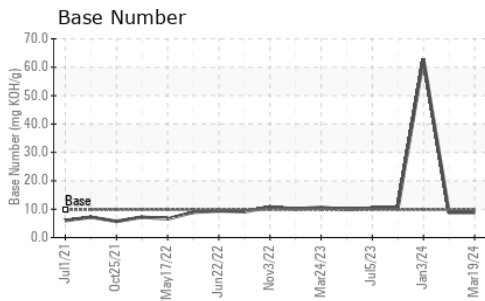
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>10</b>	10	▲ 93
Potassium	ppm	ASTM D5185m	>20	<b>7</b>	4	▲ 4813
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	▲ 0.20
Soot %	%	*ASTM D7844	>3	<b>0.3</b>	0.3	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.7</b>	6.2	20.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.7</b>	18.3	17.8
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>3</b>	0	▲ 3548
Boron	ppm	ASTM D5185m	0	<b>20</b>	17	252
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	2
Molybdenum	ppm	ASTM D5185m	60	<b>54</b>	57	752
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	1
Magnesium	ppm	ASTM D5185m	1010	<b>861</b>	885	846
Calcium	ppm	ASTM D5185m	1070	<b>1000</b>	1022	912
Phosphorus	ppm	ASTM D5185m	1150	<b>956</b>	999	996
Zinc	ppm	ASTM D5185m	1270	<b>1160</b>	1173	1156
Sulfur	ppm	ASTM D5185m	2060	<b>3396</b>	3355	3111
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.7</b>	14.5	14.8
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.8</b>	8.8	62.9
Visc @ 100°C	cSt	ASTM D445	15.4	<b>12.8</b>	13.3	▲ 20.0



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0070962  
**Lab Number** : 06124204  
**Unique Number** : 10938355  
**Test Package** : FLEET

**Received** : 20 Mar 2024  
**Tested** : 21 Mar 2024  
**Diagnosed** : 21 Mar 2024 - Wes Davis

**GFL Environmental - 657 - Charlottesville Hauling**  
 5498 Richmond Road  
 Troy, VA  
 US 22974  
 Contact: Brian Ulickas  
 bulickas@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: