



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

Area  
**(34717UA)**  
Machine Id  
**820048**  
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>GFL011830</b>	GFL0108294	GFL0098171
Sample Date		Client Info		<b>28 Feb 2024</b>	12 Feb 2024	12 Jan 2024
Machine Age	hrs	Client Info		<b>12476</b>	12366	12255
Oil Age	hrs	Client Info		<b>12476</b>	12366	12255
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Not Changd	N/A
Filter Changed		Client Info		<b>Changed</b>	Not Changd	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>65</b>	53	8
Chromium	ppm	ASTM D5185m	>20	<b>2</b>	2	<1
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	2
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>13</b>	13	<1
Lead	ppm	ASTM D5185m	>40	<b>3</b>	1	0
Copper	ppm	ASTM D5185m	>330	<b>2</b>	2	1
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	0
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**

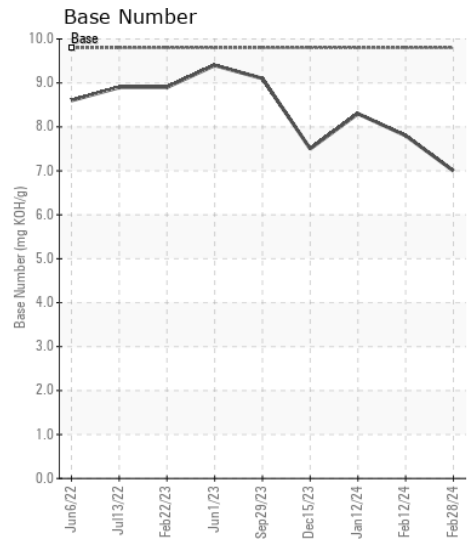
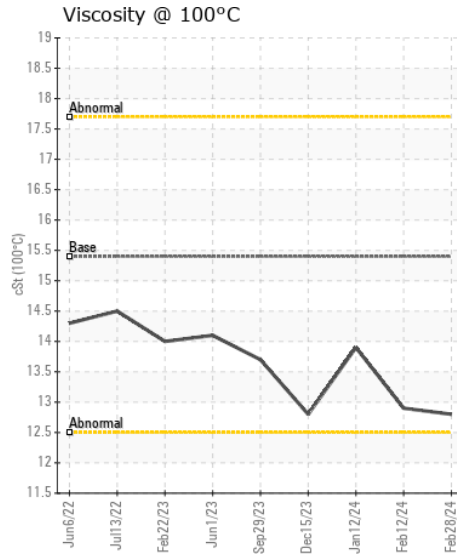
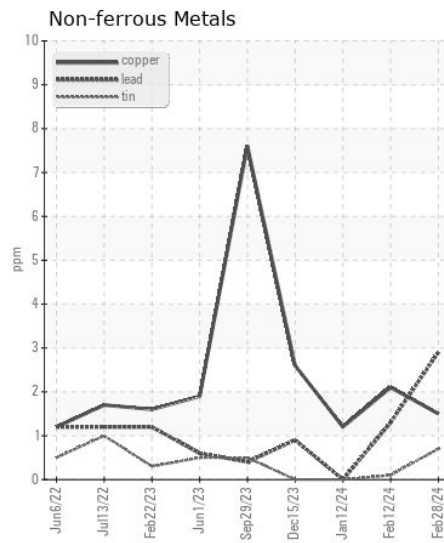
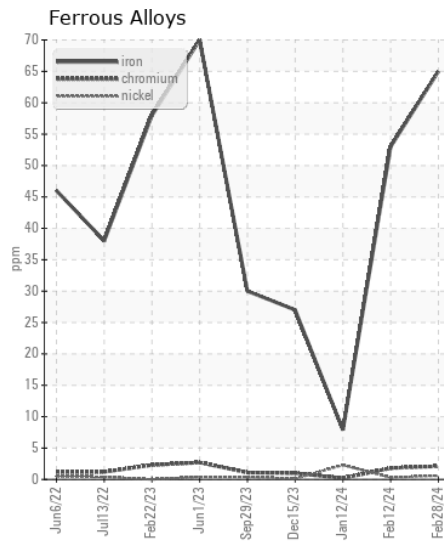
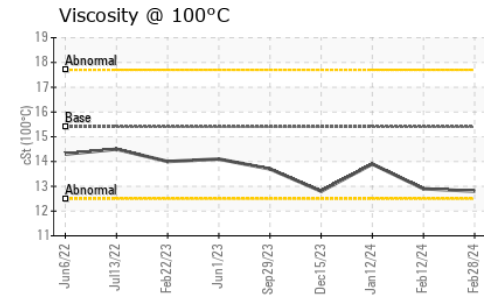
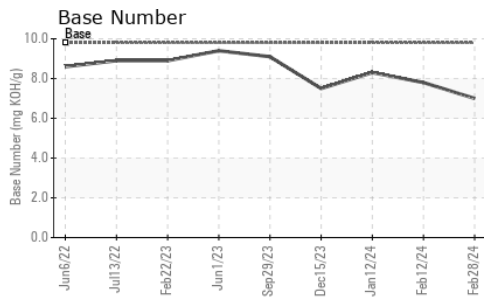
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>6</b>	7	4
Potassium	ppm	ASTM D5185m	>20	<b>13</b>	14	2
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>1.7</b>	1.4	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>11.6</b>	10.6	6.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>23.2</b>	21.5	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	>0.2	<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>6</b>	3	1
Boron	ppm	ASTM D5185m	0	<b>7</b>	4	10
Barium	ppm	ASTM D5185m	0	<b>0</b>	12	0
Molybdenum	ppm	ASTM D5185m	60	<b>57</b>	59	58
Manganese	ppm	ASTM D5185m	0	<b>1</b>	<1	0
Magnesium	ppm	ASTM D5185m	1010	<b>1050</b>	873	978
Calcium	ppm	ASTM D5185m	1070	<b>1260</b>	1058	1165
Phosphorus	ppm	ASTM D5185m	1150	<b>978</b>	982	1083
Zinc	ppm	ASTM D5185m	1270	<b>1405</b>	1165	1277
Sulfur	ppm	ASTM D5185m	2060	<b>3199</b>	3170	3409
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>19.3</b>	17.7	13.9
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>7.0</b>	7.8	8.3
Visc @ 100°C	cSt	ASTM D445	15.4	<b>12.8</b>	12.9	13.9



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0111830 **Received** : 29 Feb 2024  
**Lab Number** : 06104195 **Tested** : 01 Mar 2024  
**Unique Number** : 10902425 **Diagnosed** : 01 Mar 2024 - Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 652 - Fredericksburg Hauling**  
 10954 Houser Drive  
 Fredericksburg, VA  
 US 22408  
 Contact: WILLIAM MILO  
 wmilo@gflenv.com  
 T:  
 F:

Certificate L2367  
 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)