



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

Machine Id  
**411055**  
 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>GFL0103510</b>	GFL0103503	GFL0094780
Sample Date		Client Info		<b>06 Jan 2024</b>	29 Dec 2023	15 Dec 2023
Machine Age	hrs	Client Info		<b>5254</b>	5185	5125
Oil Age	hrs	Client Info		<b>129</b>	60	1099
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	Changed
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>110	<b>0</b>	4	12
Chromium	ppm	ASTM D5185m	>4	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	<1	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>&lt;1</b>	2	4
Lead	ppm	ASTM D5185m	>45	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m	>85	<b>0</b>	<1	<1
Tin	ppm	ASTM D5185m	>4	<b>0</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

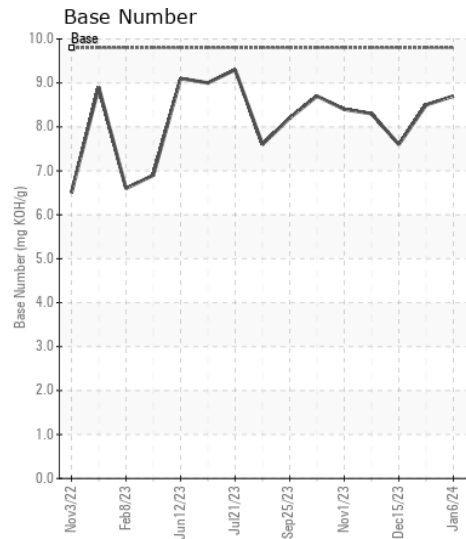
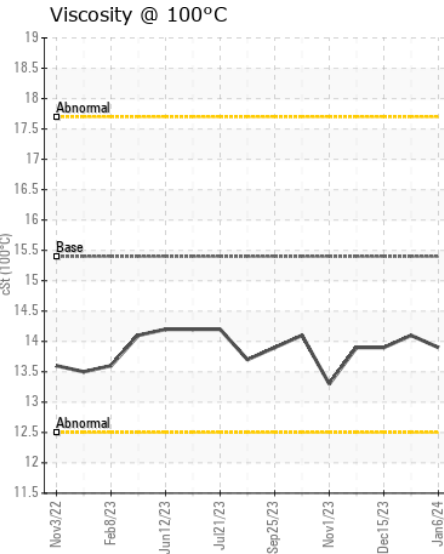
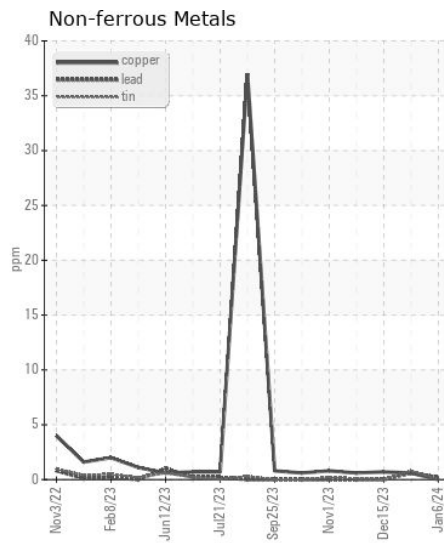
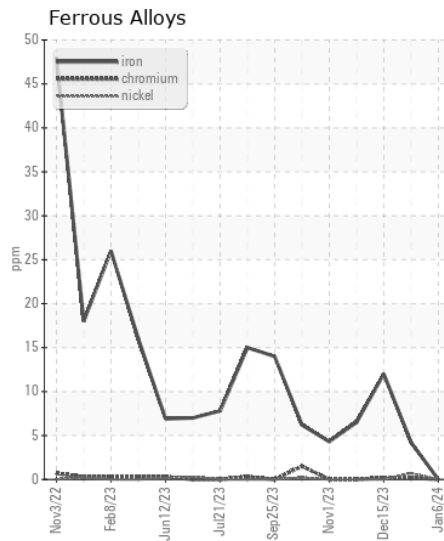
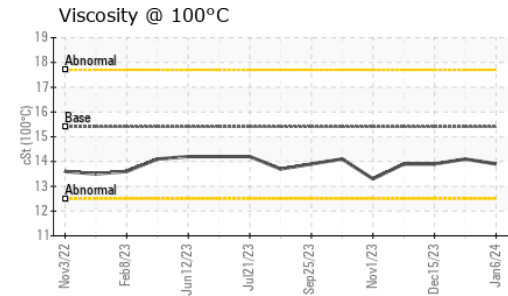
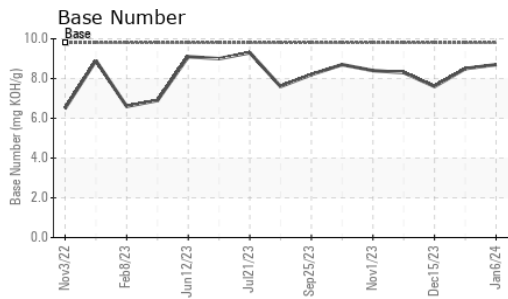
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>30	<b>3</b>	5	8
Potassium	ppm	ASTM D5185m	>20	<b>10</b>	12	19
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>	0.2	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>5.4</b>	5.7	7.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.0</b>	18.7	19.2
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>&lt;1</b>	0	0
Boron	ppm	ASTM D5185m	0	<b>17</b>	20	13
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>83</b>	86	96
Manganese	ppm	ASTM D5185m	0	<b>0</b>	<1	0
Magnesium	ppm	ASTM D5185m	1010	<b>899</b>	895	890
Calcium	ppm	ASTM D5185m	1070	<b>1017</b>	1045	1063
Phosphorus	ppm	ASTM D5185m	1150	<b>915</b>	877	863
Zinc	ppm	ASTM D5185m	1270	<b>1227</b>	1169	1181
Sulfur	ppm	ASTM D5185m	2060	<b>2923</b>	3078	2940
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>13.4</b>	14.4	15.4
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.7</b>	8.5	7.6
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.9</b>	14.1	13.9



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0103510 **Received** : 11 Jan 2024  
**Lab Number** : 06057760 **Diagnosed** : 12 Jan 2024  
**Unique Number** : 10829142 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**GFL environmental - 867 - Trafford (Blount Hauling)**  
 1130 County Line Rd  
 Trafford, AL  
 US 35172  
 Contact: Jonathan Williams  
 jonathan.williams@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)