



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

Machine Id  
**825018-140**  
 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>GFL0119278</b>	GFL0070922	GFL0058090
Sample Date		Client Info		<b>03 Jul 2024</b>	23 May 2024	20 Feb 2024
Machine Age	hrs	Client Info		<b>20814</b>	20594	19995
Oil Age	hrs	Client Info		<b>396</b>	175	502
Filter Age	hrs	Client Info		<b>396</b>	175	502
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	>120	<b>4</b>	5	7
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	0
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	2	2
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>330	<b>1</b>	<1	<1
Tin	ppm	ASTM D5185m	>15	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

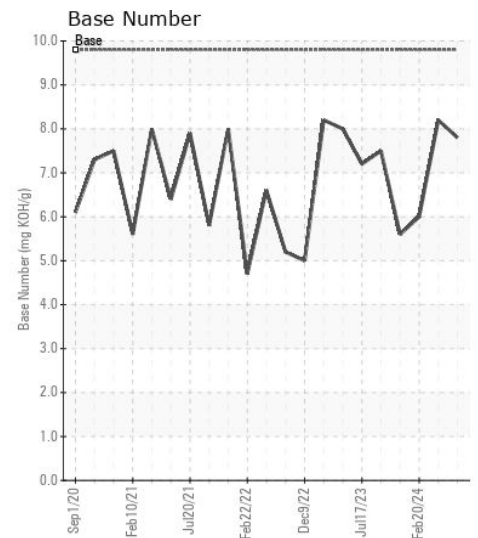
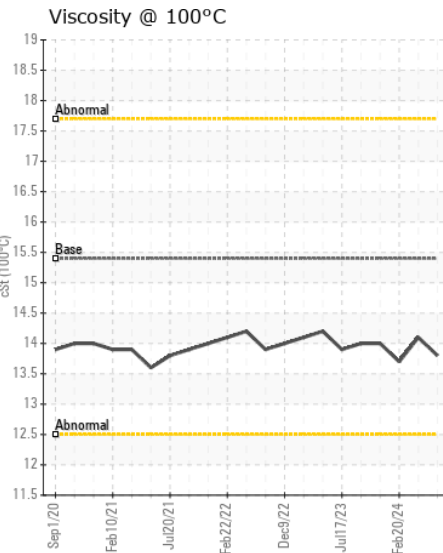
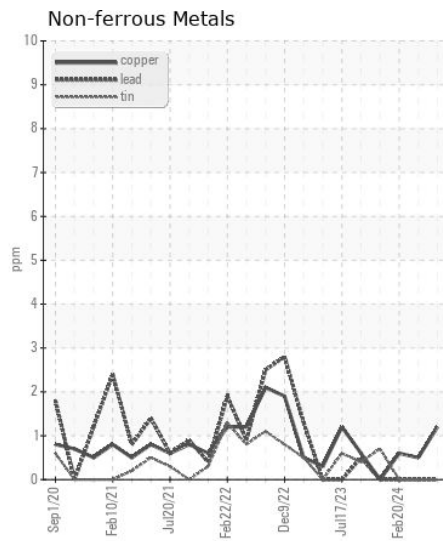
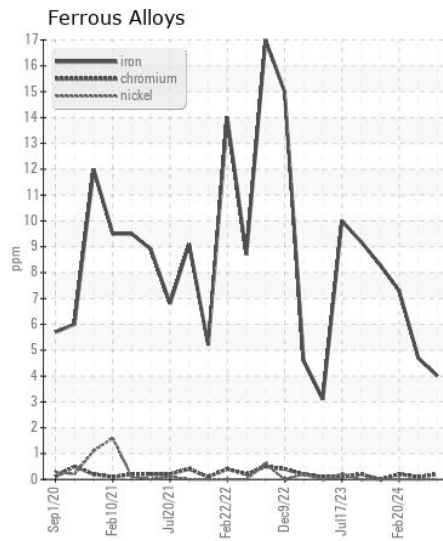
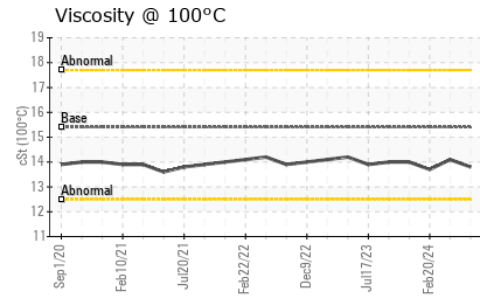
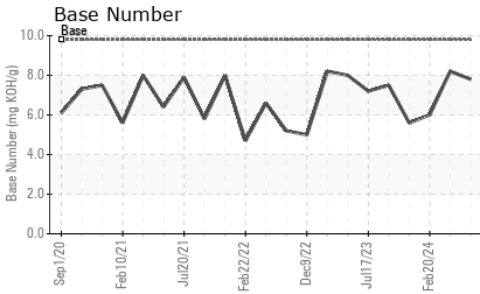
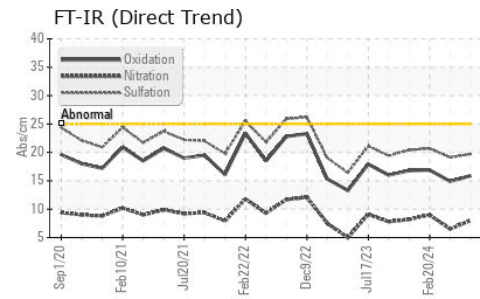
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>6</b>	5	6
Potassium	ppm	ASTM D5185m	>20	<b>7</b>	7	36
Fuel		WC Method	>3.0	<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	>4	<b>0.3</b>	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.0</b>	6.5	9.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.7</b>	19.1	20.7
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>25</b>	12	68
Boron	ppm	ASTM D5185m	0	<b>2</b>	2	2
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185m	60	<b>61</b>	60	68
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m	1010	<b>965</b>	991	942
Calcium	ppm	ASTM D5185m	1070	<b>1125</b>	1124	977
Phosphorus	ppm	ASTM D5185m	1150	<b>950</b>	1053	836
Zinc	ppm	ASTM D5185m	1270	<b>1131</b>	1265	1210
Sulfur	ppm	ASTM D5185m	2060	<b>2864</b>	3571	2522
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.9</b>	14.9	16.9
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>7.8</b>	8.2	6.0
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.8</b>	14.1	13.7



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0119278  
**Lab Number** : 06228398  
**Unique Number** : 11111891  
**Test Package** : FLEET

**Received** : 05 Jul 2024  
**Tested** : 08 Jul 2024  
**Diagnosed** : 08 Jul 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: