



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



Machine Id  
**726048-18**  
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>GFL0103137</b>	GFL0091945	GFL0075040
Sample Date		Client Info		<b>18 Jan 2024</b>	18 Oct 2023	28 Jul 2023
Machine Age	hrs	Client Info		<b>13560</b>	12973	12443
Oil Age	hrs	Client Info		<b>587</b>	530	587
Filter Age	hrs	Client Info		<b>587</b>	530	587
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>130	<b>17</b>	18	18
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>3</b>	4	2
Lead	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>125	<b>1</b>	<1	1
Tin	ppm	ASTM D5185m	>4	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

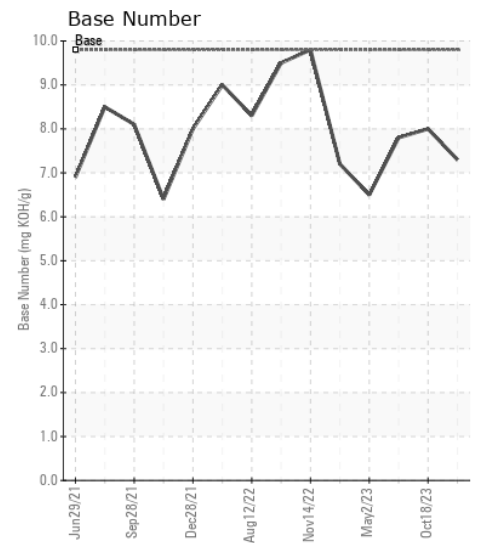
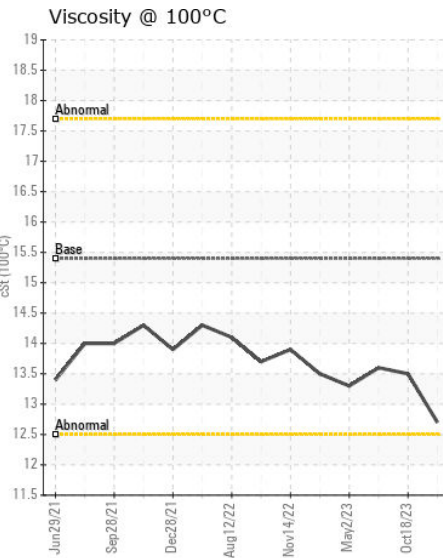
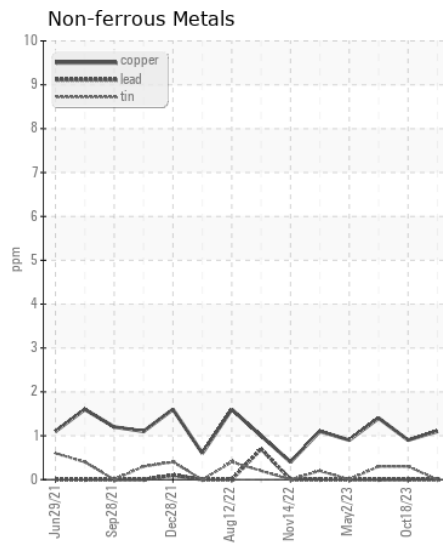
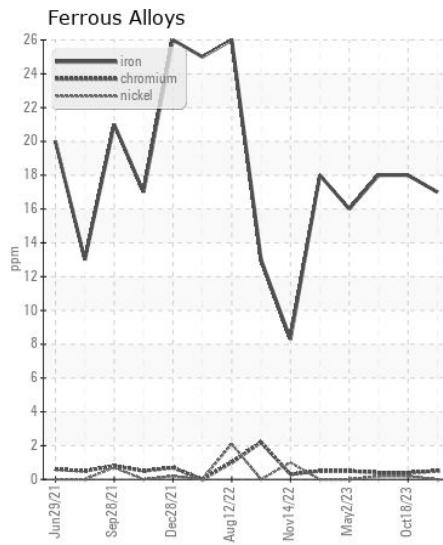
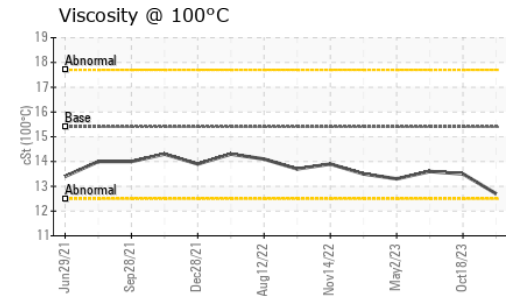
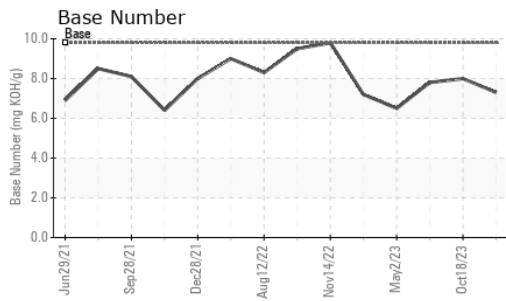
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>5</b>	7	5
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	3	<1
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	>6	<b>0.5</b>	0.6	0.8
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.7</b>	8.6	10.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.8</b>	19.2	21.2
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	2
Boron	ppm	ASTM D5185m	0	<b>2</b>	2	1
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>61</b>	65	60
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m	1010	<b>1045</b>	982	971
Calcium	ppm	ASTM D5185m	1070	<b>1057</b>	1113	1075
Phosphorus	ppm	ASTM D5185m	1150	<b>1073</b>	1013	994
Zinc	ppm	ASTM D5185m	1270	<b>1345</b>	1313	1235
Sulfur	ppm	ASTM D5185m	2060	<b>3101</b>	3306	3158
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.9</b>	15.8	18.6
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>7.3</b>	8.0	7.8
Visc @ 100°C	cSt	ASTM D445	15.4	<b>12.7</b>	13.5	13.6



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0103137 **Received** : 19 Jan 2024  
**Lab Number** : 06065403 **Diagnosed** : 22 Jan 2024  
**Unique Number** : 10836785 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 683 - Ruckersville Hauling**  
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 Ruckersville, VA  
 US 22698  
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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)