



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

Machine Id  
**SS0156**  
 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>GFL0116232</b>	GFL0116270	GFL0094863
Sample Date		Client Info		<b>10 Jun 2024</b>	14 Mar 2024	08 Nov 2023
Machine Age	hrs	Client Info		<b>3177</b>	3148	3124
Oil Age	hrs	Client Info		<b>29</b>	67	43
Filter Age	hrs	Client Info		<b>29</b>	67	43
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Sample Status				<b>NORMAL</b>	NORMAL	ABNORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>19</b>	19	21
Chromium	ppm	ASTM D5185m	>20	<b>10</b>	10	10
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>1</b>	1	1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>8</b>	7	8
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>330	<b>1</b>	<1	<1
Tin	ppm	ASTM D5185m	>15	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

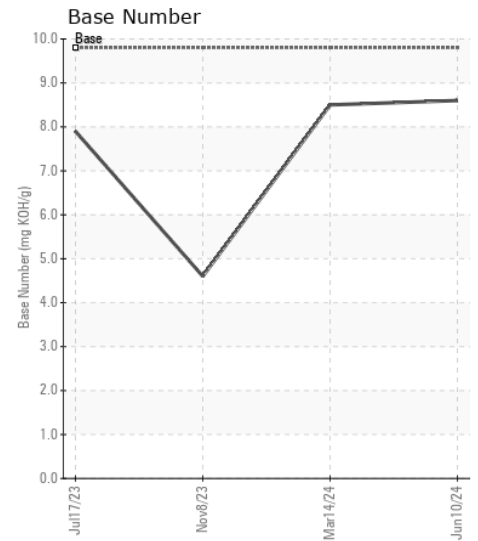
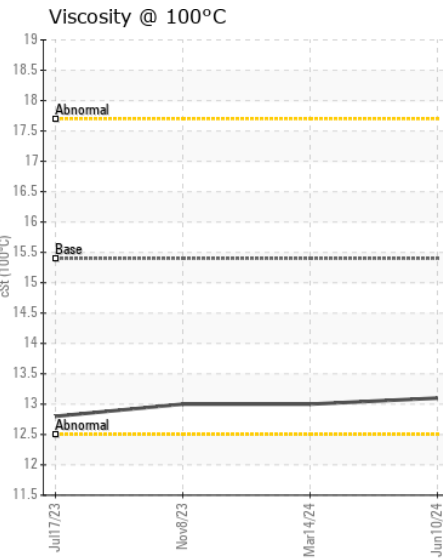
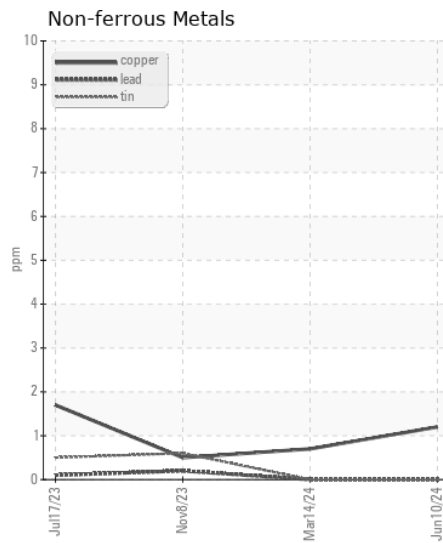
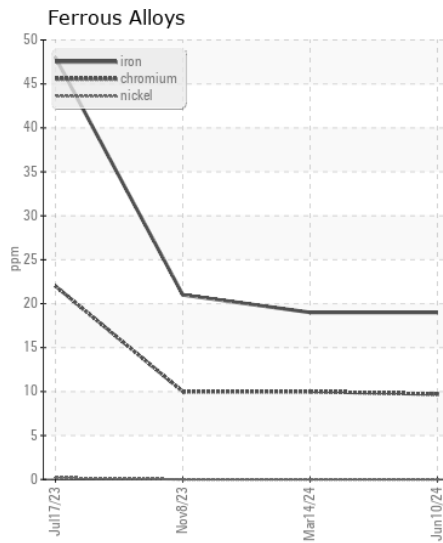
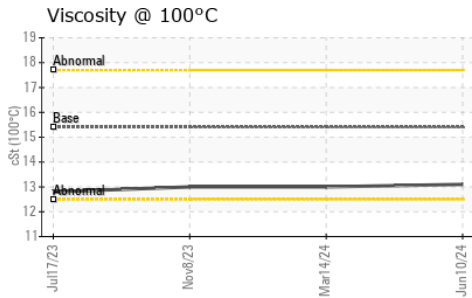
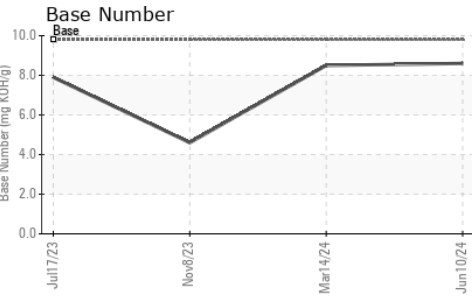
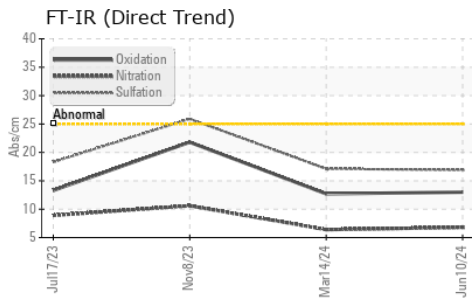
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>24</b>	22	▲ 26
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	2	5
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>	0.1	0.5
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.8</b>	6.4	10.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>16.9</b>	17.1	25.9
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>	3	4
Boron	ppm	ASTM D5185m	0	<b>13</b>	11	16
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>47</b>	48	46
Manganese	ppm	ASTM D5185m	0	<b>1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>743</b>	719	687
Calcium	ppm	ASTM D5185m	1070	<b>1338</b>	1339	1384
Phosphorus	ppm	ASTM D5185m	1150	<b>1027</b>	972	1009
Zinc	ppm	ASTM D5185m	1270	<b>1171</b>	1147	1206
Sulfur	ppm	ASTM D5185m	2060	<b>3701</b>	3716	3308
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>13.0</b>	12.7	21.8
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.6</b>	8.5	4.6
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.1</b>	13.0	13.0



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0116232  
**Lab Number** : 06211332  
**Unique Number** : 11084196  
**Test Package** : FLEET

**Received** : 17 Jun 2024  
**Tested** : 19 Jun 2024  
**Diagnosed** : 19 Jun 2024 - Wes Davis

**GFL Environmental - 625 - Harrison Hauling**  
 2480 S Clare Ave  
 Clare, MI  
 US 48617

Contact: RON TROJANEK  
 ront@northern1.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)

T: (231)624-0372

F: