



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



Area  
**(8AA0HYN)**  
Machine Id  
**427062-402074**  
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>GFL06105699</b>	GFL0090446	GFL0086306
Sample Date		Client Info		<b>02 Oct 2023</b>	28 Aug 2023	12 Jul 2023
Machine Age	hrs	Client Info		<b>0</b>	29707	29620
Oil Age	hrs	Client Info		<b>0</b>	499	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	N/A
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	>120	<b>46</b>	3	2
Chromium	ppm	ASTM D5185m	>20	<b>2</b>	0	<1
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>6</b>	<1	1
Lead	ppm	ASTM D5185m	>40	<b>15</b>	0	0
Copper	ppm	ASTM D5185m	>330	<b>26</b>	<1	<1
Tin	ppm	ASTM D5185m	>15	<b>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**

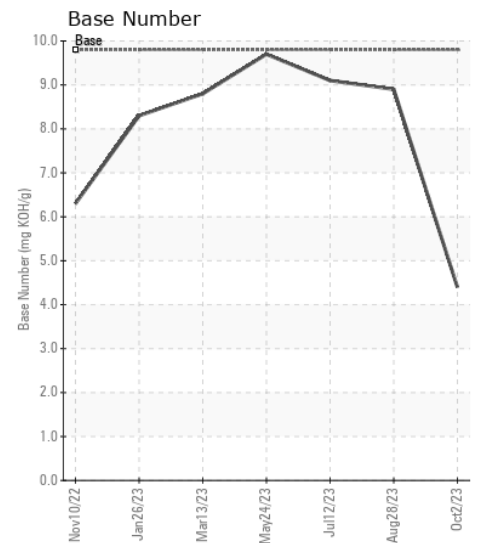
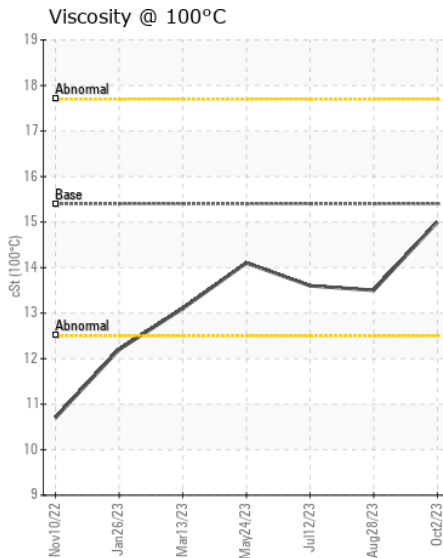
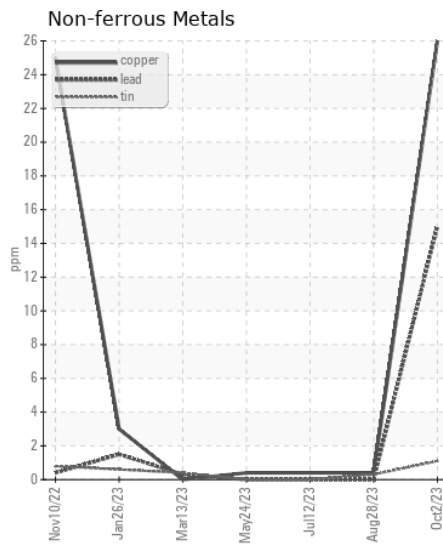
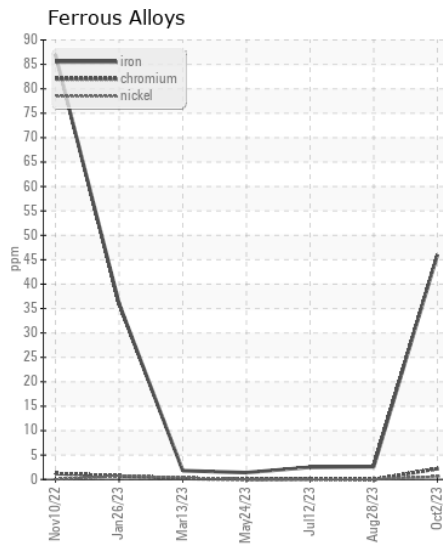
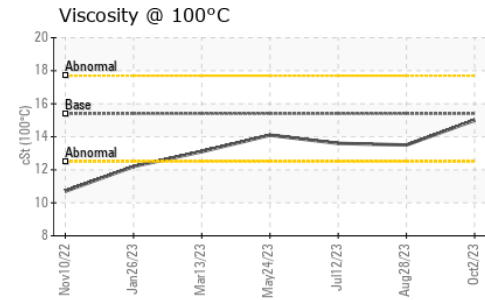
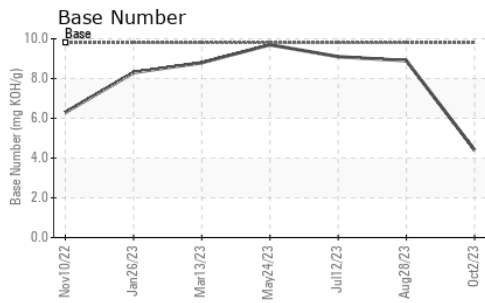
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>8</b>	3	2
Potassium	ppm	ASTM D5185m	>20	<b>6</b>	2	4
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>0.5</b>	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>13.5</b>	6.1	5.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>26.7</b>	16.5	17.5
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>17</b>	4	5
Boron	ppm	ASTM D5185m	0	<b>3</b>	22	32
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185m	60	<b>66</b>	63	64
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m	1010	<b>929</b>	981	943
Calcium	ppm	ASTM D5185m	1070	<b>1164</b>	1159	1152
Phosphorus	ppm	ASTM D5185m	1150	<b>1049</b>	1042	1072
Zinc	ppm	ASTM D5185m	1270	<b>1275</b>	1257	1283
Sulfur	ppm	ASTM D5185m	2060	<b>2692</b>	3788	3836
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>27.8</b>	12.2	13.3
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>4.4</b>	8.9	9.1
Visc @ 100°C	cSt	ASTM D445	15.4	<b>15.0</b>	13.5	13.6



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL06105699  
**Lab Number** : 06105699  
**Unique Number** : 10903929  
**Test Package** : FLEET

**Received** : 01 Mar 2024  
**Tested** : 01 Mar 2024  
**Diagnosed** : 04 Mar 2024 - Sean Felton

GFL Environmental - 868 - Childersburg Fines Hauling (Alpine)  
 13737 Plant Rd  
 Childersburg, AL  
 US 35044

Contact: JONATHAN WILLIAMS  
 jonathan.williams@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: