



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



Area  
**TALLASSEE**  
Machine Id  
**814046**  
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>GFL0080675</b>	GFL0080698	GFL0092440
Sample Date		Client Info		<b>20 May 2024</b>	11 Apr 2024	03 Apr 2024
Machine Age	hrs	Client Info		<b>989</b>	733	664
Oil Age	hrs	Client Info		<b>989</b>	733	664
Filter Age	hrs	Client Info		<b>0</b>	0	664
Oil Changed		Client Info		<b>Not Changd</b>	N/A	Not Changd
Filter Changed		Client Info		<b>N/A</b>	N/A	Not Changd
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>120	<b>16</b>	7	5
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185m	>5	<b>2</b>	2	<1
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>1</b>	<1	0
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	1	<1
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	1	0
Copper	ppm	ASTM D5185m	>330	<b>296</b>	65	51
Tin	ppm	ASTM D5185m	>15	<b>1</b>	<1	0
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.

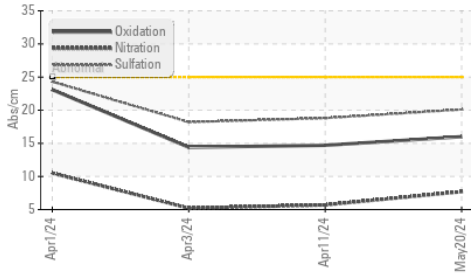
Silicon	ppm	ASTM D5185m	>25	<b>12</b>	11	10
Potassium	ppm	ASTM D5185m	>20	<b>27</b>	17	2
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>4	<b>0.4</b>	0.2	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.7</b>	5.7	5.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.1</b>	18.8	18.2
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**

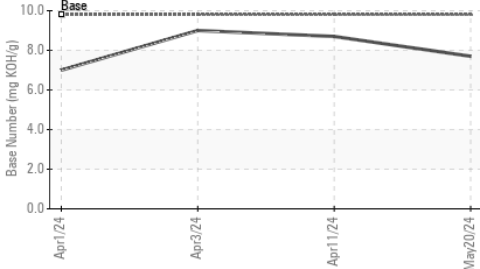
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>5</b>	4	2
Boron	ppm	ASTM D5185m	0	<b>17</b>	23	26
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>72</b>	64	66
Manganese	ppm	ASTM D5185m	0	<b>1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>970</b>	910	1033
Calcium	ppm	ASTM D5185m	1070	<b>1125</b>	1111	1203
Phosphorus	ppm	ASTM D5185m	1150	<b>1044</b>	962	1101
Zinc	ppm	ASTM D5185m	1270	<b>1228</b>	1182	1317
Sulfur	ppm	ASTM D5185m	2060	<b>3101</b>	3512	4170
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.0</b>	14.7	14.4
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>7.7</b>	8.7	9.0
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.4</b>	13.7	13.8

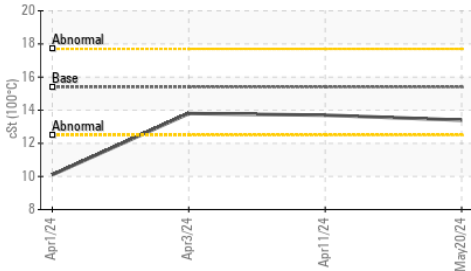
FT-IR (Direct Trend)



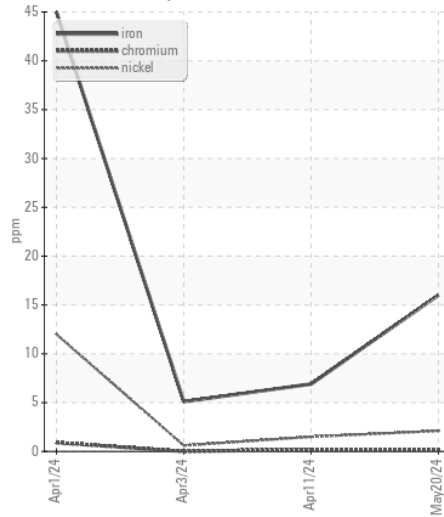
Base Number



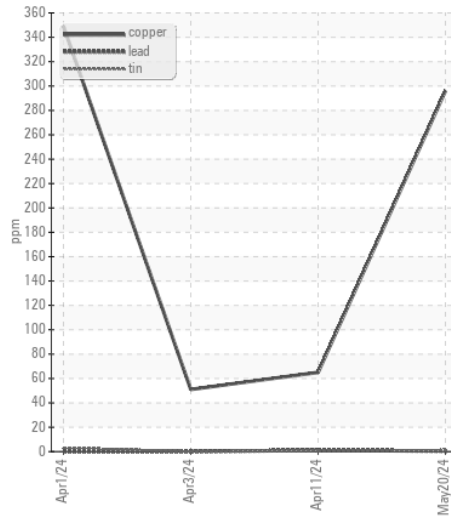
Viscosity @ 100°C



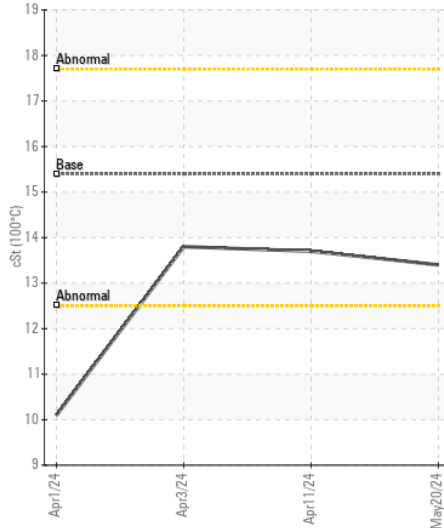
Ferrous Alloys



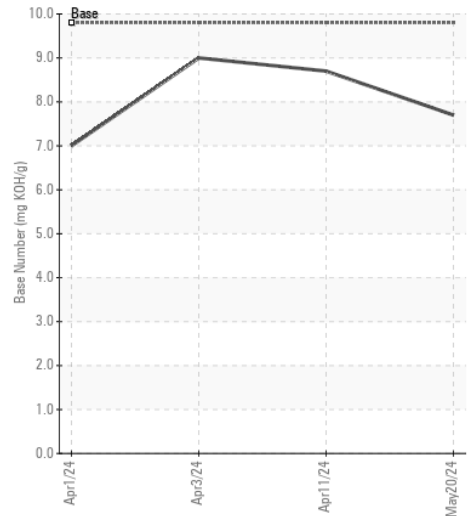
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : GFL0080675  
 Lab Number : 06187174  
 Unique Number : 11043926  
 Test Package : FLEET

Received : 21 May 2024  
 Tested : 23 May 2024  
 Diagnosed : 23 May 2024 - Wes Davis

GFL Environmental - 172 - Montgomery-Alexander City-Tallahassee  
 Multiple Sites  
 Montgomery, AL  
 US 36108  
 Contact: BRANDON HURST  
 brandonhurst@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)

T:  
F: