



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

Area

(ECY338)

Machine Id

**AUTOCAR 3742**

Component

**Diesel Engine**

Fluid

**PETRO CANADA DURON SHP 15W40 (10 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0116799</b>	GFL0116734	GFL0109030
Sample Date		Client Info		<b>24 Apr 2024</b>	19 Mar 2024	29 Feb 2024
Machine Age	hrs	Client Info		<b>19121</b>	18808	18630
Oil Age	hrs	Client Info		<b>3379</b>	3066	2888
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Changd</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	>165	<b>18</b>	9	23
Chromium	ppm	ASTM D5185m	>5	<b>1</b>	<1	1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	3
Lead	ppm	ASTM D5185m	>150	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m	>90	<b>&lt;1</b>	4	1
Tin	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</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.

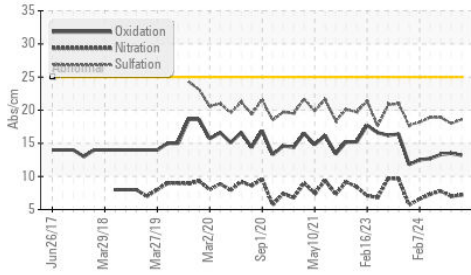
Silicon	ppm	ASTM D5185m	>35	<b>4</b>	4	3
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	3
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>7.5	<b>0.7</b>	0.4	1
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.2</b>	7.0	7.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.6</b>	18.0	18.9
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**

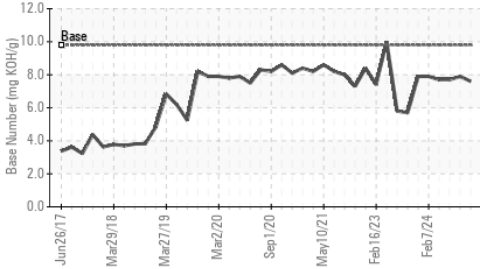
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>4</b>	2	4
Boron	ppm	ASTM D5185m	0	<b>7</b>	8	8
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>60</b>	59	54
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185m	1010	<b>844</b>	864	702
Calcium	ppm	ASTM D5185m	1070	<b>1130</b>	1193	1122
Phosphorus	ppm	ASTM D5185m	1150	<b>989</b>	1028	636
Zinc	ppm	ASTM D5185m	1270	<b>1185</b>	1199	1125
Sulfur	ppm	ASTM D5185m	2060	<b>3432</b>	3656	2648
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>13.2</b>	13.5	13.3
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>7.6</b>	7.9	7.7
Visc @ 100°C	cSt	ASTM D445	15.4	<b>12.6</b>	12.6	12.5

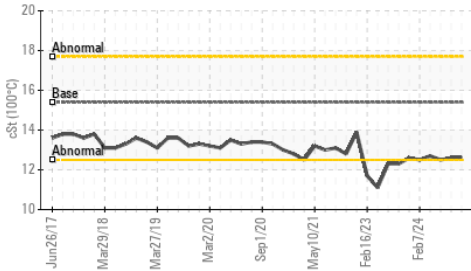
**FT-IR (Direct Trend)**



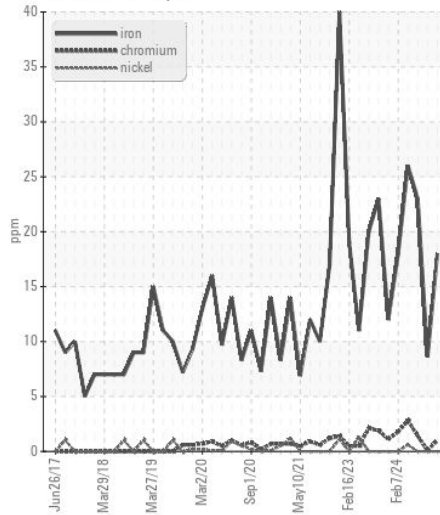
**Base Number**



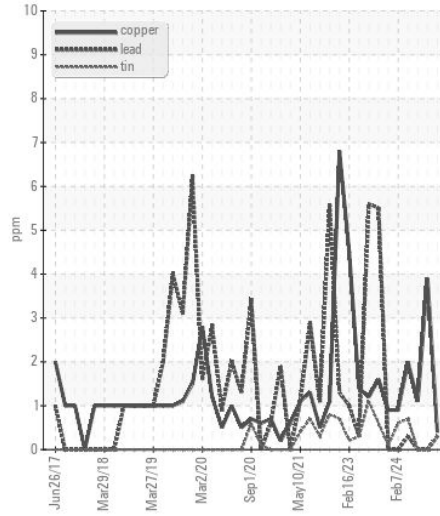
**Viscosity @ 100°C**



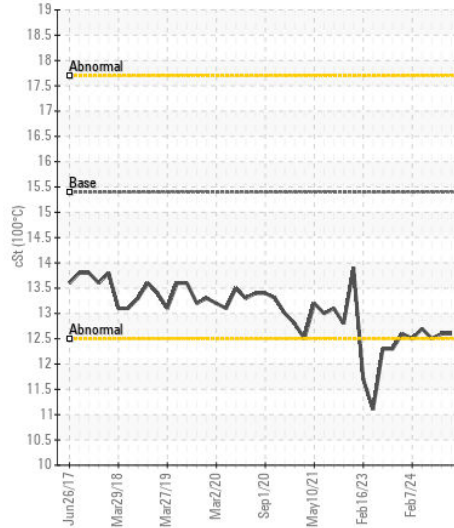
**Ferrous Alloys**



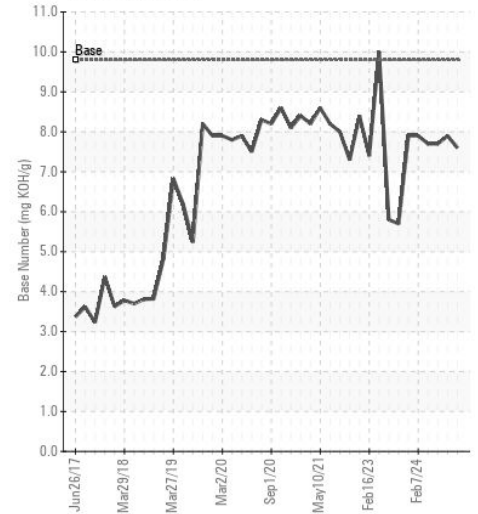
**Non-ferrous Metals**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0116799  
**Lab Number** : 06161216  
**Unique Number** : 10996639  
**Test Package** : FLEET

**Received** : 26 Apr 2024  
**Tested** : 26 Apr 2024  
**Diagnosed** : 26 Apr 2024 - Wes Davis

**GFL Environmental - 009 - Fairburn**  
 6905 Roosevelt Hwy  
 Fairburn, GA  
 US 30213  
 Contact: Eric Jones  
 erjones@gflenv.com  
 T: (678)630-9927  
 F:

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)