



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

Machine Id  
**10809**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (7 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0118087</b>	GFL0115725	GFL0112338
Sample Date		Client Info		<b>21 May 2024</b>	01 Apr 2024	05 Mar 2024
Machine Age	hrs	Client Info		<b>20085</b>	20062	19921
Oil Age	hrs	Client Info		<b>286</b>	263	122
Filter Age	hrs	Client Info		<b>286</b>	263	122
Oil Changed		Client Info		<b>Changed</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>Changed</b>	Not Changd	Not Changd
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>75	<b>14</b>	3	8
Chromium	ppm	ASTM D5185m	>5	<b>1</b>	0	0
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>15	<b>4</b>	1	2
Lead	ppm	ASTM D5185m	>25	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185m	>100	<b>1</b>	<1	1
Tin	ppm	ASTM D5185m	>4	<b>1</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</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.

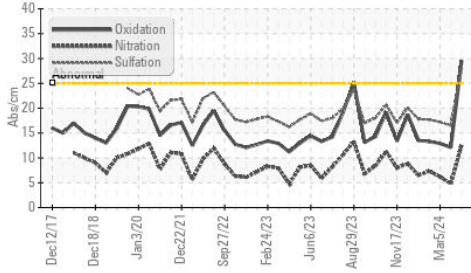
Silicon	ppm	ASTM D5185m	>25	<b>10</b>	5	6
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	<1	1
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>6	<b>0.2</b>	0.1	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>12.5</b>	4.8	6.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>27.9</b>	16.5	17.2
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**

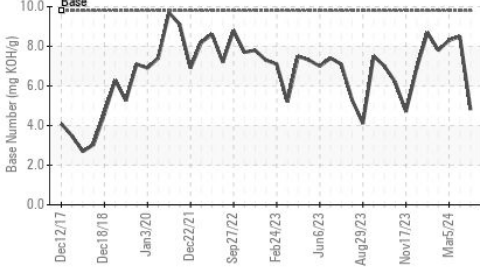
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>11</b>	3	14
Boron	ppm	ASTM D5185m	0	<b>52</b>	11	15
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>47</b>	60	61
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m	1010	<b>726</b>	906	870
Calcium	ppm	ASTM D5185m	1070	<b>1114</b>	1085	1026
Phosphorus	ppm	ASTM D5185m	1150	<b>727</b>	936	999
Zinc	ppm	ASTM D5185m	1270	<b>828</b>	1154	1186
Sulfur	ppm	ASTM D5185m	2060	<b>2582</b>	3542	3336
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>29.5</b>	12.1	12.9
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>4.8</b>	8.5	8.3
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.6</b>	13.5	13.4

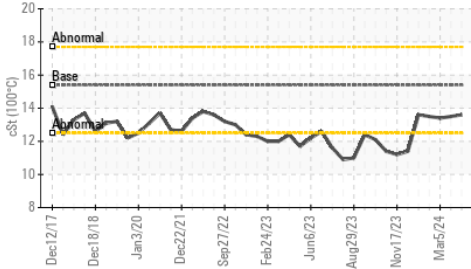
**FT-IR (Direct Trend)**



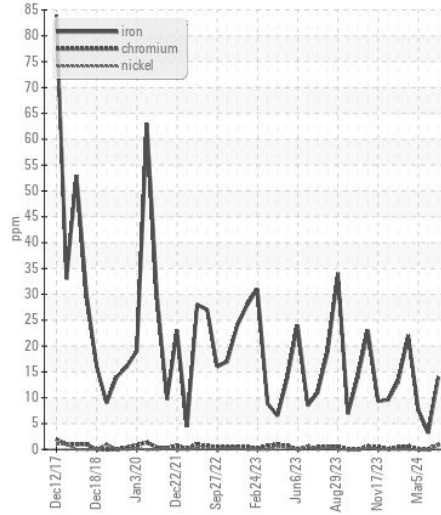
**Base Number**



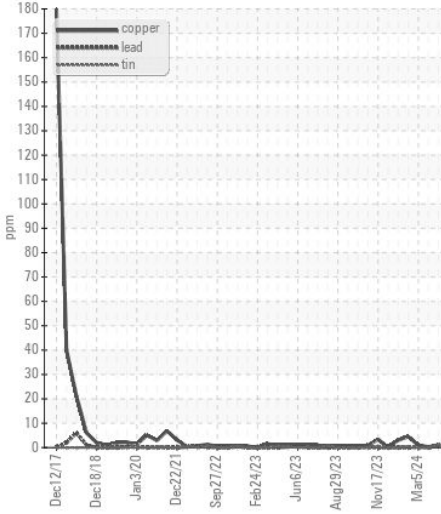
**Viscosity @ 100°C**



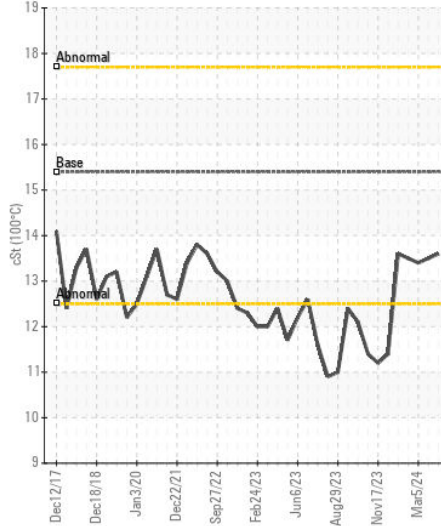
**Ferrous Alloys**



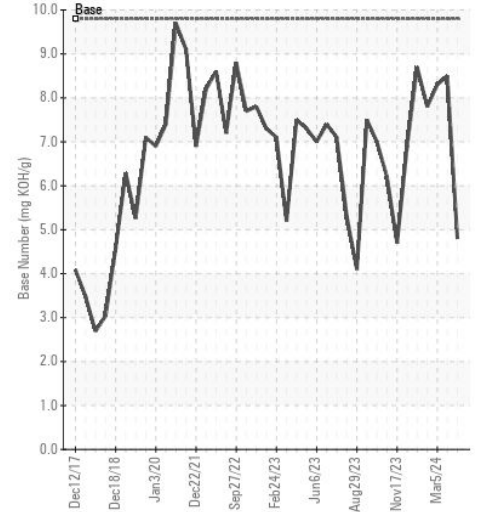
**Non-ferrous Metals**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0118087  
**Lab Number** : 06187395  
**Unique Number** : 11044147  
**Test Package** : FLEET

**Received** : 22 May 2024  
**Tested** : 23 May 2024  
**Diagnosed** : 24 May 2024 - Don Baldrige

**GFL Environmental - 010 - Stockbridge**  
 1280 Rum Creek Parkway  
 Stockbridge, GA  
 US 30281  
 Contact: JOSHUA TINKER  
 joshuatinker@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: