



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

Machine Id  
**529134-7945 FREIGHTLINER CASCADIA 125**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (11 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0115328</b>	GFL0115306	GFL0066515
Sample Date		Client Info		<b>23 May 2024</b>	10 Mar 2024	17 Jan 2024
Machine Age	mls	Client Info		<b>0</b>	0	139068
Oil Age	mls	Client Info		<b>0</b>	0	0
Filter Age	mls	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	Changed
Filter Changed		Client Info		<b>N/A</b>	N/A	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	<b>14</b>	15	19
Chromium	ppm	ASTM D5185m	>6	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>3	<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	>50	<b>5</b>	2	10
Lead	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>50	<b>11</b>	7	5
Tin	ppm	ASTM D5185m	>6	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</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.

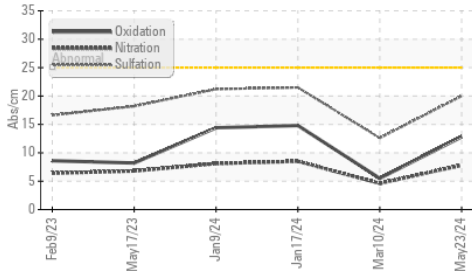
Silicon	ppm	ASTM D5185m	>50	<b>1</b>	15	10
Potassium	ppm	ASTM D5185m	>20	<b>9</b>	<1	19
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.3</b>	0.1	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.8</b>	4.6	8.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.0</b>	12.6	21.5
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**

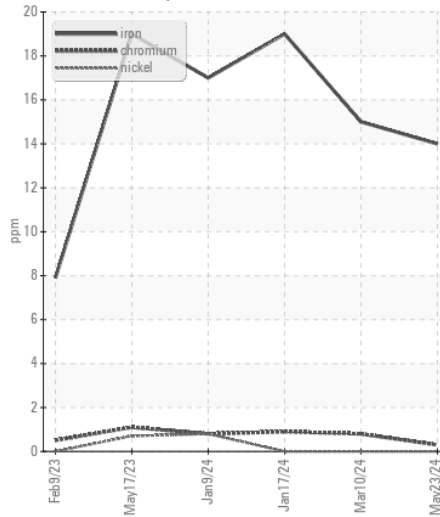
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	0	1
Boron	ppm	ASTM D5185m	0	<b>62</b>	2	109
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>34</b>	9	49
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>135</b>	72	273
Calcium	ppm	ASTM D5185m	1070	<b>2307</b>	2076	1712
Phosphorus	ppm	ASTM D5185m	1150	<b>1003</b>	742	998
Zinc	ppm	ASTM D5185m	1270	<b>1211</b>	953	1219
Sulfur	ppm	ASTM D5185m	2060	<b>4021</b>	3014	3207
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>12.8</b>	5.5	14.8
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>6.4</b>	6.7	6.7
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.7</b>	16.76	14.9

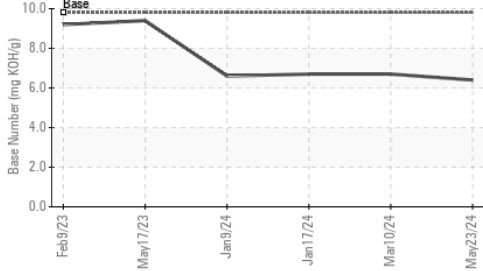
**FT-IR (Direct Trend)**



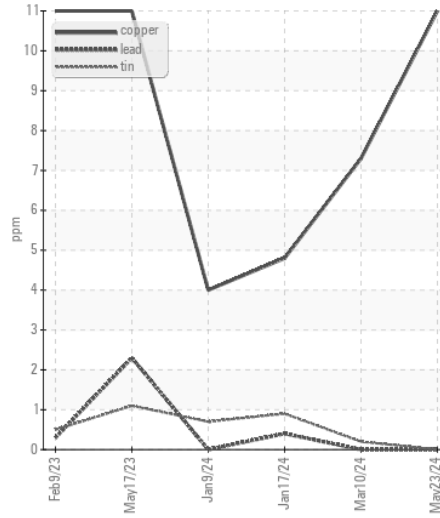
**Ferrous Alloys**



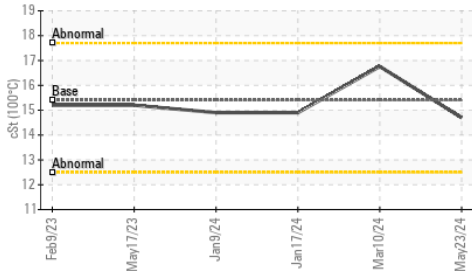
**Base Number**



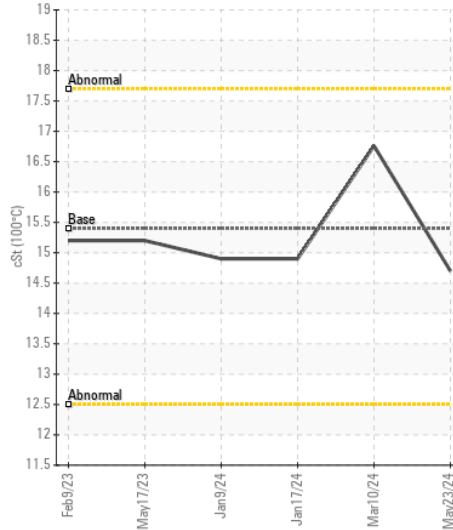
**Non-ferrous Metals**



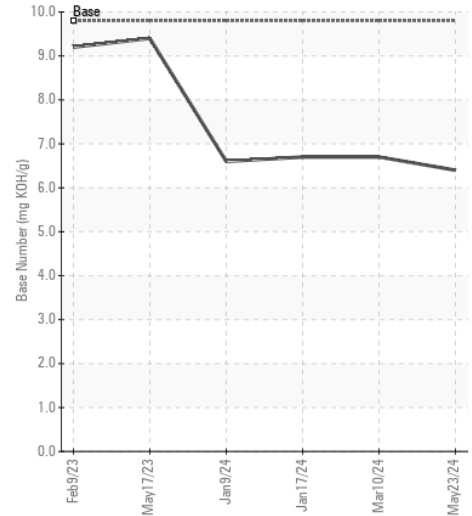
**Viscosity @ 100°C**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0115328  
**Lab Number** : 06197298  
**Unique Number** : 11059421  
**Test Package** : FLEET

**Received** : 03 Jun 2024  
**Tested** : 03 Jun 2024  
**Diagnosed** : 04 Jun 2024 - Sean Felton

**GFL Environmental - 980 - Northside Hauling**  
 1820 Candle Ridge Park Dr  
 Houston, TX  
 US 77073  
 Contact: Edwin Collins  
 ecolins@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: