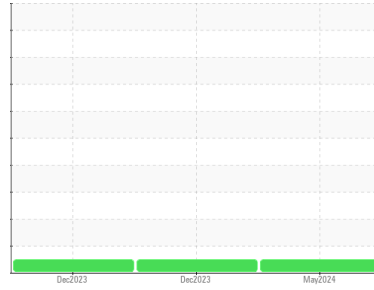




# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id  
**525109 FREIGHTLINER CASCADIA 125**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**

### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil.

#### 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.

### SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>GFL0115335</b>	GFL0066606	GFL0066599
Sample Date	Client Info		<b>27 May 2024</b>	27 Dec 2023	16 Dec 2023
Machine Age	hrs	Client Info	<b>0</b>	0	0
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

### CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<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

### WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>11</b>	2	<1
Chromium	ppm	ASTM D5185m >20	<b>1</b>	0	<1
Nickel	ppm	ASTM D5185m >4	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m >3	<b>1</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>6</b>	<1	1
Lead	ppm	ASTM D5185m >40	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m >330	<b>3</b>	<1	1
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	0	<1
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1

### ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>1</b>	1	1
Barium	ppm	ASTM D5185m 0	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m 60	<b>58</b>	51	52
Manganese	ppm	ASTM D5185m 0	<b>1</b>	0	<1
Magnesium	ppm	ASTM D5185m 1010	<b>31</b>	15	11
Calcium	ppm	ASTM D5185m 1070	<b>2512</b>	2431	2395
Phosphorus	ppm	ASTM D5185m 1150	<b>992</b>	1056	1100
Zinc	ppm	ASTM D5185m 1270	<b>1241</b>	1301	1283
Sulfur	ppm	ASTM D5185m 2060	<b>3074</b>	3277	3355

### CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>8</b>	6	6
Sodium	ppm	ASTM D5185m	<b>2</b>	0	<1
Potassium	ppm	ASTM D5185m >20	<b>3</b>	1	2

### INFRA-RED

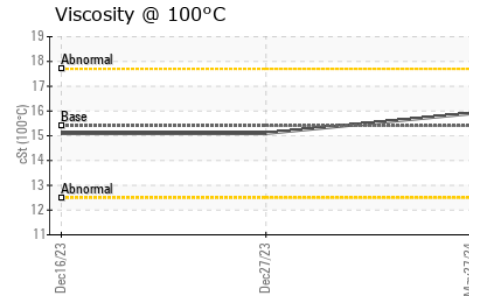
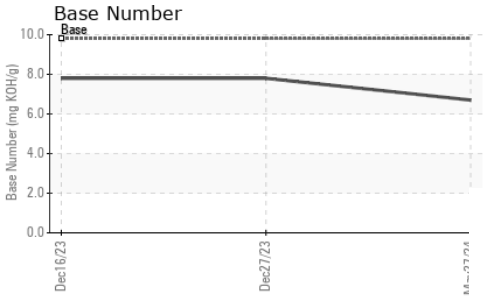
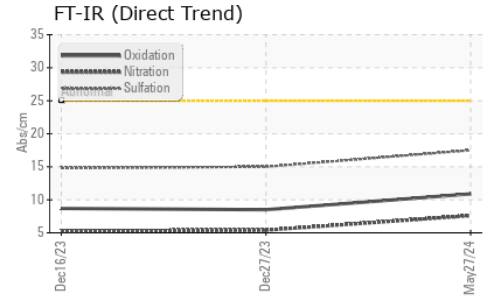
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.2</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624 >20	<b>7.6</b>	5.4	5.3
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>17.5</b>	15.0	14.8

### FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>10.9</b>	8.5	8.7
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>6.7</b>	7.8	7.8



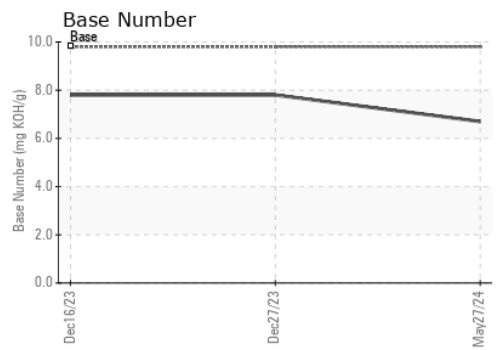
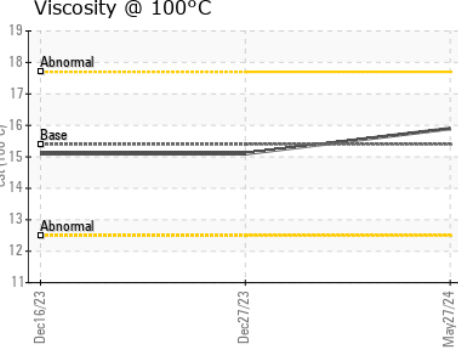
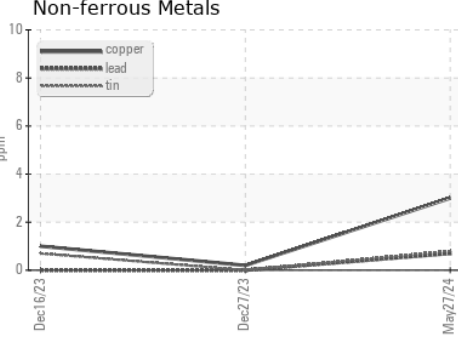
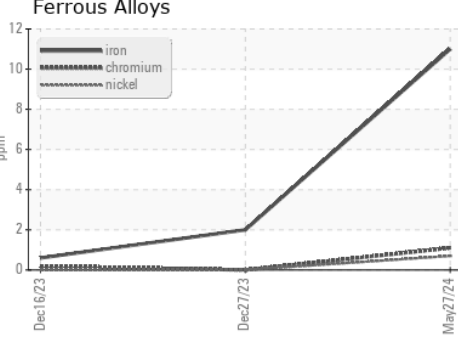
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	15.9	15.1

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0115335      **Received** : 28 May 2024  
**Lab Number** : 06191850      **Tested** : 29 May 2024  
**Unique Number** : 11048602      **Diagnosed** : 30 May 2024 - Sean Felton  
**Test Package** : FLEET

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