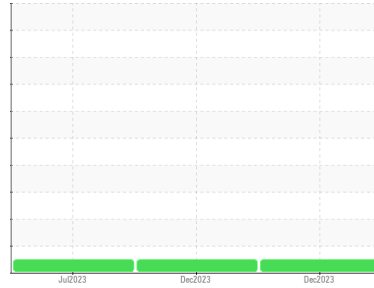




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**525145- SW7531 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>GFL0066580</b>	GFL0066607	GFL0085487
Sample Date	Client Info	<b>28 Dec 2023</b>	26 Dec 2023	18 Jul 2023
Machine Age	mls Client Info	<b>0</b>	0	362717
Oil Age	mls Client Info	<b>0</b>	0	0
Oil Changed	Client Info	<b>N/A</b>	N/A	Changed
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 >80	<b>7</b>	5	52
Chromium	ppm ASTM D5185m >5	<b>0</b>	<1	2
Nickel	ppm ASTM D5185m >2	<b>0</b>	<1	<1
Titanium	ppm ASTM D5185m	<b>0</b>	0	0
Silver	ppm ASTM D5185m >3	<b>0</b>	<1	0
Aluminum	ppm ASTM D5185m >30	<b>&lt;1</b>	2	10
Lead	ppm ASTM D5185m >30	<b>0</b>	<1	0
Copper	ppm ASTM D5185m >150	<b>4</b>	4	10
Tin	ppm ASTM D5185m >5	<b>0</b>	<1	<1
Vanadium	ppm ASTM D5185m	<b>0</b>	<1	0
Cadmium	ppm ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 0	<b>6</b>	7	0
Barium	ppm ASTM D5185m 0	<b>0</b>	0	2
Molybdenum	ppm ASTM D5185m 60	<b>43</b>	39	41
Manganese	ppm ASTM D5185m 0	<b>0</b>	<1	<1
Magnesium	ppm ASTM D5185m 1010	<b>48</b>	23	576
Calcium	ppm ASTM D5185m 1070	<b>2481</b>	2328	1743
Phosphorus	ppm ASTM D5185m 1150	<b>1008</b>	1018	1001
Zinc	ppm ASTM D5185m 1270	<b>1252</b>	1195	1249
Sulfur	ppm ASTM D5185m 2060	<b>3154</b>	2998	3818

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >20	<b>5</b>	5	0
Sodium	ppm ASTM D5185m	<b>0</b>	<1	0
Potassium	ppm ASTM D5185m >20	<b>1</b>	3	6

## INFRA-RED

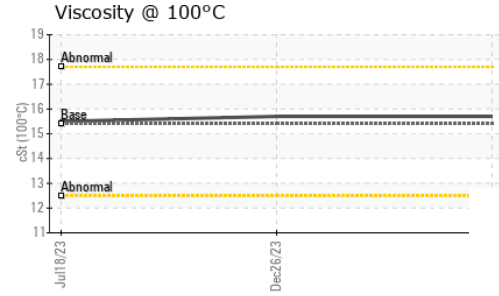
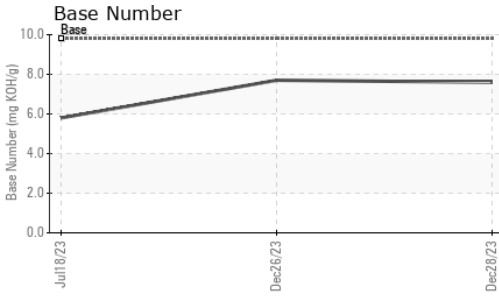
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	<b>0.2</b>	0.2	1.2
Nitration	Abs/cm *ASTM D7624 >20	<b>6.2</b>	6.2	12.5
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>16.0</b>	16.1	28.1

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>9.5</b>	9.5	22.3
Base Number (BN)	mg KOH/g ASTM D2896 9.8	<b>7.6</b>	7.7	5.8



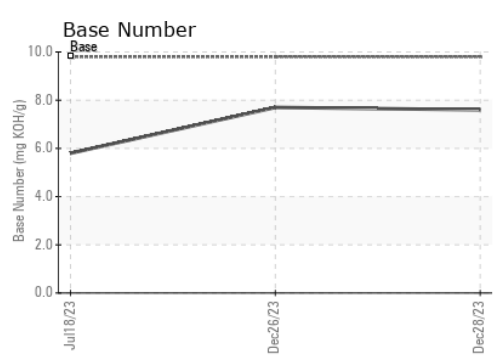
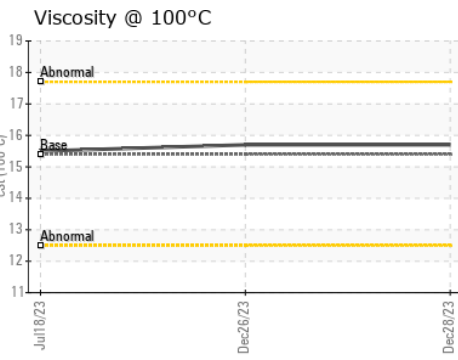
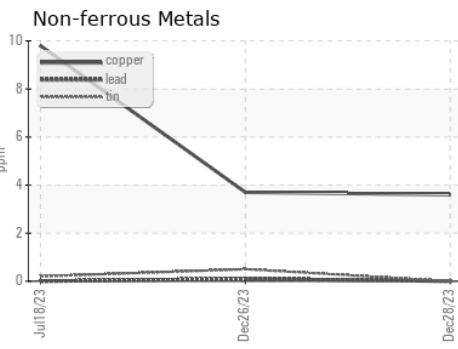
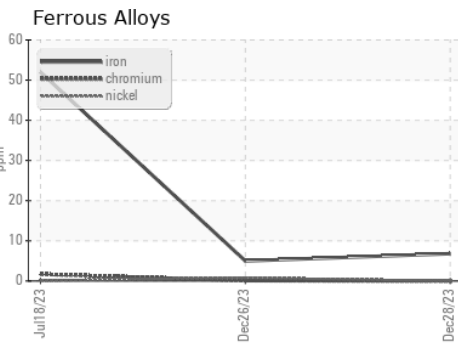
# OIL ANALYSIS REPORT



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	15.7	15.5

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0066580 **Received** : 05 Jan 2024  
**Lab Number** : 06051749 **Diagnosed** : 08 Jan 2024  
**Unique Number** : 10817698 **Diagnostician** : Jonathan Hester  
**Test Package** : FLEET

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

Certificate L2367  
 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)