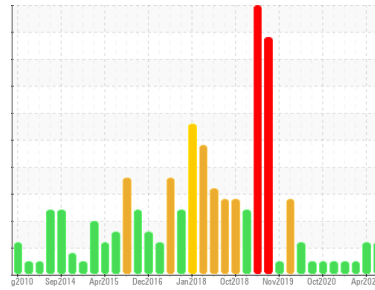




# PROBLEM SUMMARY

Sample Rating Trend



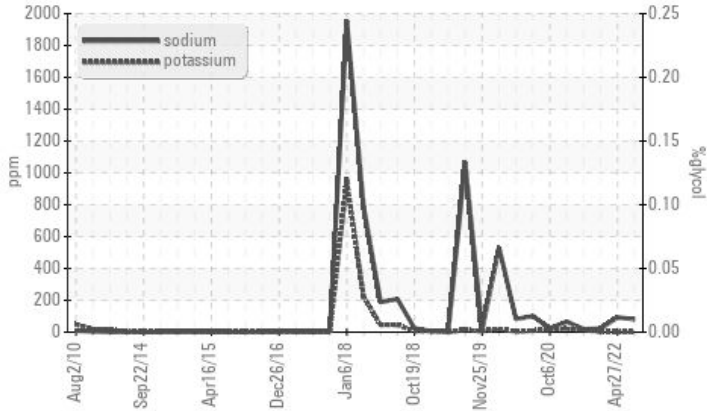
GLYCOL



Machine Id  
**FREIGHTLINER 8084**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (48 QTS)**

## COMPONENT CONDITION SUMMARY

### ▲ Glycol Contamination



## RECOMMENDATION

No corrective action is recommended at this time.  
 Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

Sample Status			ATTENTION	ATTENTION	NORMAL
Sodium	ppm	ASTM D5185m	▲ 81	▲ 93	22

Customer Id: GFL9999  
 Sample No.: GFL0052514  
 Lab Number: 05596660  
 Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Jonathan Hester +1 919-379-4092 x4092  
[jhester@wearcheckusa.com](mailto:jhester@wearcheckusa.com)

To change component or sample information:  
 Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

*There are no recommended actions for this sample.*

## HISTORICAL DIAGNOSIS

**27 Apr 2022 Diag: Jonathan Hester**

GLYCOL



No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. Sodium and/or potassium levels are high. Test for glycol is negative. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report



**07 Dec 2021 Diag: Wes Davis**

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report



**03 Sep 2021 Diag: Wes Davis**

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

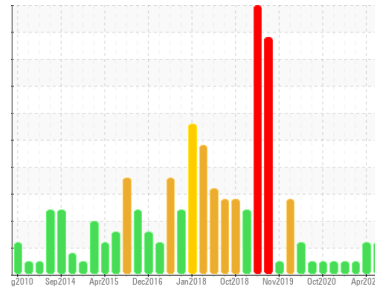
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



GLYCOL



Machine Id

## FREIGHTLINER 8084

Component

Diesel Engine

Fluid

PETRO CANADA DURON SHP 15W40 (48 QTS)

### DIAGNOSIS

#### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

Sodium and/or potassium levels remain high. Test for glycol is negative.

#### 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	history 1	history 2	
Sample Number	Client Info	<b>GFL0052514</b>	GFL0048468	GFL0040821	
Sample Date	Client Info	<b>18 Jul 2022</b>	27 Apr 2022	07 Dec 2021	
Machine Age	mls	Client Info	<b>152158</b>	222	300745
Oil Age	mls	Client Info	<b>240</b>	377	148587
Oil Changed	Client Info	<b>Not Chngd</b>	Not Chngd	N/A	
Sample Status		<b>ATTENTION</b>	ATTENTION	NORMAL	

### CONTAMINATION

method	limit/base	current	history 1	history 2
Fuel	WC Method >3.0	<b>&lt;1.0</b>	<1.0	<1.0

### WEAR METALS

method	limit/base	current	history 1	history 2
Iron	ppm ASTM D5185m >90	<b>27</b>	19	42
Chromium	ppm ASTM D5185m >20	<b>2</b>	2	2
Nickel	ppm ASTM D5185m >2	<b>0</b>	<1	<1
Titanium	ppm ASTM D5185m >2	<b>0</b>	<1	<1
Silver	ppm ASTM D5185m >2	<b>&lt;1</b>	<1	0
Aluminum	ppm ASTM D5185m >20	<b>3</b>	3	8
Lead	ppm ASTM D5185m >40	<b>&lt;1</b>	<1	<1
Copper	ppm ASTM D5185m >330	<b>&lt;1</b>	<1	1
Tin	ppm ASTM D5185m >15	<b>&lt;1</b>	<1	<1
Antimony	ppm ASTM D5185m	<b>---</b>	---	0
Vanadium	ppm ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm ASTM D5185m	<b>0</b>	0	0

### ADDITIVES

method	limit/base	current	history 1	history 2
Boron	ppm ASTM D5185m 0	<b>11</b>	0	13
Barium	ppm ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m 60	<b>67</b>	71	63
Manganese	ppm ASTM D5185m 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm ASTM D5185m 1010	<b>908</b>	972	1078
Calcium	ppm ASTM D5185m 1070	<b>1535</b>	1704	1271
Phosphorus	ppm ASTM D5185m 1150	<b>1125</b>	1272	1155
Zinc	ppm ASTM D5185m 1270	<b>1426</b>	1537	1321
Sulfur	ppm ASTM D5185m 2060	<b>3840</b>	3459	2874

### CONTAMINANTS

method	limit/base	current	history 1	history 2
Silicon	ppm ASTM D5185m >25	<b>5</b>	4	7
Sodium	ppm ASTM D5185m	<b>▲ 81</b>	<b>▲ 93</b>	22
Potassium	ppm ASTM D5185m >20	<b>&lt;1</b>	0	3
Glycol	% *ASTM D2982	<b>NEG</b>	NEG	NEG

### INFRA-RED

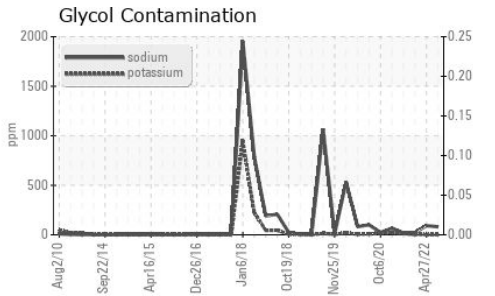
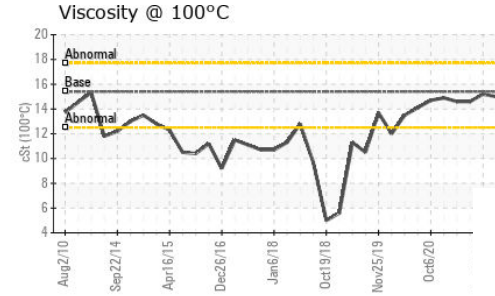
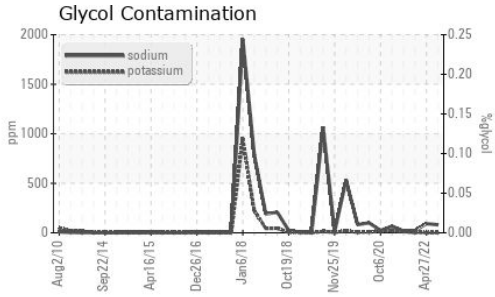
method	limit/base	current	history 1	history 2
Soot %	% *ASTM D7844 >6	<b>0.2</b>	0.1	0.2
Nitration	Abs/cm *ASTM D7624 >20	<b>10.7</b>	9.4	9.9
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>23.4</b>	22.5	21.8

### FLUID DEGRADATION

method	limit/base	current	history 1	history 2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>20.0</b>	19.0	19.2
Base Number (BN)	mg KOH/g ASTM D2896 9.8	<b>9.5</b>	10.8	8.2



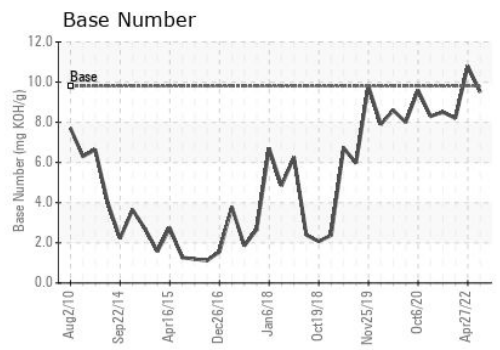
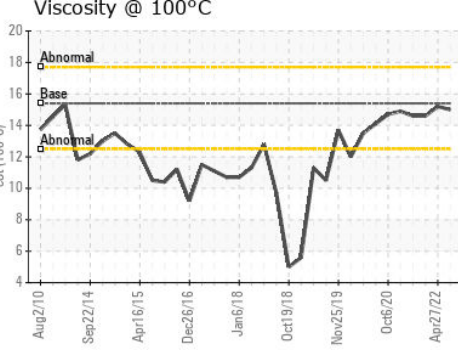
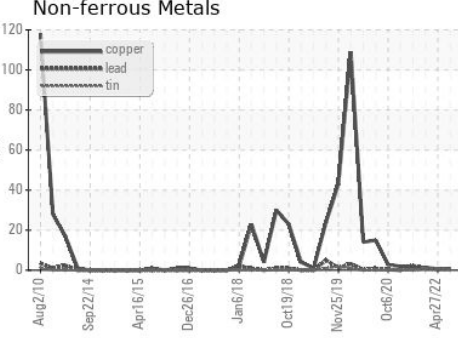
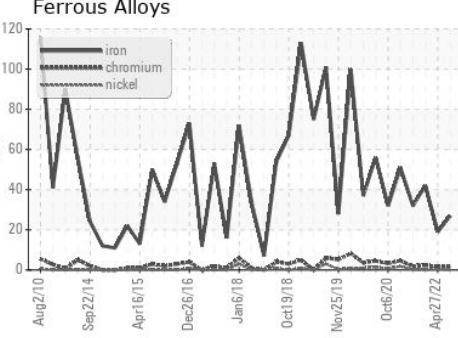
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history 1	history 2
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	history 1	history 2
Visc @ 100°C	cSt	ASTM D445	15.4	15.0	15.2

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0052514 **Received** : 21 Jul 2022  
**Lab Number** : 05596660 **Diagnosed** : 22 Jul 2022  
**Unique Number** : 10061140 **Diagnostician** : Jonathan Hester  
**Test Package** : FLEET ( Additional Tests: Glycol )

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)

US  
 Contact:  
 T:  
 F: