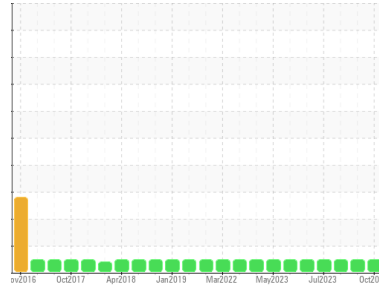




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**11252**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 15W40 (16 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>GFL0083139</b>	GFL0083143	GFL0083133
Sample Date	Client Info	<b>30 Oct 2023</b>	25 Sep 2023	31 Aug 2023
Machine Age	hrs	Client Info	<b>0</b>	0
Oil Age	hrs	Client Info	<b>0</b>	0
Oil Changed	Client Info	<b>N/A</b>	N/A	Not Changd
Sample Status		<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >5	<b>&lt;1.0</b>	0.3	<1.0
Glycol	WC Method	<b>NEG</b>	NEG	NEG

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >100	<b>16</b>	29	50
Chromium	ppm ASTM D5185m >20	<b>&lt;1</b>	1	3
Nickel	ppm ASTM D5185m >4	<b>0</b>	0	2
Titanium	ppm ASTM D5185m	<b>0</b>	<1	<1
Silver	ppm ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm ASTM D5185m >20	<b>3</b>	5	6
Lead	ppm ASTM D5185m >40	<b>&lt;1</b>	<1	<1
Copper	ppm ASTM D5185m >330	<b>1</b>	15	3
Tin	ppm ASTM D5185m >15	<b>0</b>	2	0
Vanadium	ppm ASTM D5185m	<b>0</b>	0	<1
Cadmium	ppm ASTM D5185m	<b>&lt;1</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 0	<b>1</b>	1	22
Barium	ppm ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m 60	<b>65</b>	70	55
Manganese	ppm ASTM D5185m 0	<b>0</b>	2	<1
Magnesium	ppm ASTM D5185m 1010	<b>940</b>	959	729
Calcium	ppm ASTM D5185m 1070	<b>1068</b>	1295	1454
Phosphorus	ppm ASTM D5185m 1150	<b>1018</b>	1072	842
Zinc	ppm ASTM D5185m 1270	<b>1238</b>	1359	1053
Sulfur	ppm ASTM D5185m 2060	<b>3535</b>	2515	2989

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>7</b>	8	13
Sodium	ppm ASTM D5185m	<b>0</b>	5	14
Potassium	ppm ASTM D5185m >20	<b>2</b>	8	1

## INFRA-RED

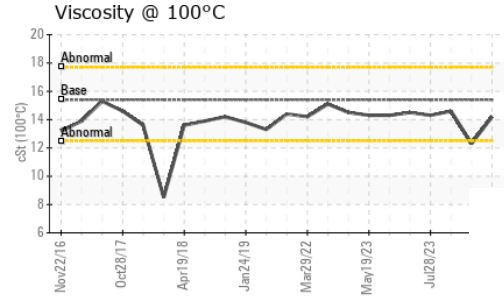
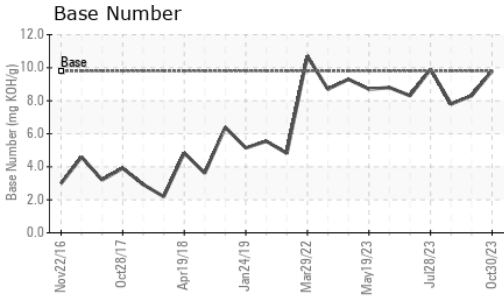
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	<b>1.2</b>	0.4	1.4
Nitration	Abs/cm *ASTM D7624 >20	<b>8.8</b>	8.4	8.8
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>20.8</b>	19.7	21.2

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>16.1</b>	15.8	15.1
Base Number (BN)	mg KOH/g ASTM D2896 9.8	<b>9.8</b>	8.3	7.8



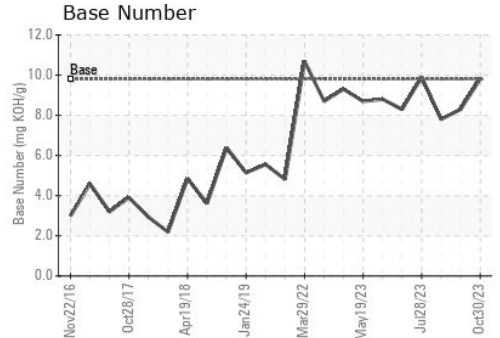
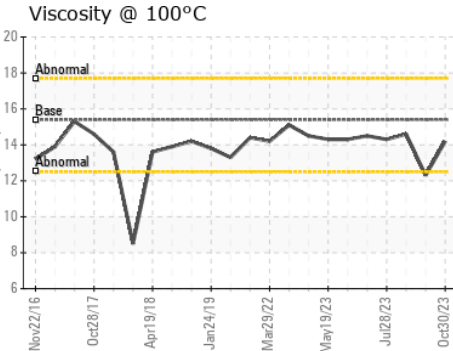
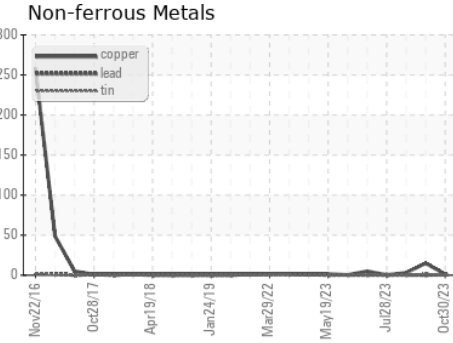
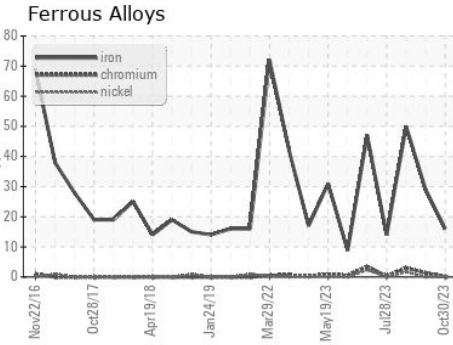
# OIL ANALYSIS REPORT



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	<b>14.2</b>	12.3	14.6

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0083139 **Received** : 02 Nov 2023  
**Lab Number** : **05996508** **Diagnosed** : 02 Nov 2023  
**Unique Number** : 10724868 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 074 - Douglas - Transwaste**  
 1219 Landfill Road  
 Douglas, GA  
 US 31533  
 Contact: CURTIS JACOBS  
 CURTIS.JACOBS@GFLENV.COM  
 T: (912)384-6001  
 F:

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)