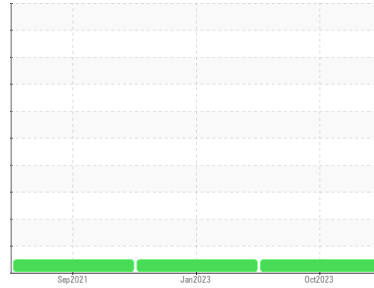




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**960T**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

### 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>GFL0097226</b>	GFL0066563	GFL0012610
Sample Date	Client Info	<b>24 Oct 2023</b>	04 Jan 2023	15 Sep 2021
Machine Age	hrs	Client Info	<b>0</b>	0
Oil Age	hrs	Client Info	<b>0</b>	0
Oil Changed	Client Info	<b>Not Changed</b>	Changed	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
Glycol	WC Method	<b>NEG</b>	NEG	NEG

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >100	<b>20</b>	8	11
Chromium	ppm ASTM D5185m >20	<b>&lt;1</b>	<1	<1
Nickel	ppm ASTM D5185m >4	<b>0</b>	1	0
Titanium	ppm ASTM D5185m	<b>&lt;1</b>	0	<1
Silver	ppm ASTM D5185m >3	<b>0</b>	0	2
Aluminum	ppm ASTM D5185m >20	<b>1</b>	<1	1
Lead	ppm ASTM D5185m >40	<b>&lt;1</b>	0	<1
Copper	ppm ASTM D5185m >330	<b>2</b>	<1	<1
Tin	ppm ASTM D5185m >15	<b>0</b>	0	0
Antimony	ppm ASTM D5185m	<b>---</b>	---	0
Vanadium	ppm ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm ASTM D5185m	<b>0</b>	0	<1

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 0	<b>13</b>	15	25
Barium	ppm ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m 60	<b>61</b>	64	62
Manganese	ppm ASTM D5185m 0	<b>0</b>	0	<1
Magnesium	ppm ASTM D5185m 1010	<b>862</b>	806	899
Calcium	ppm ASTM D5185m 1070	<b>1045</b>	1038	1068
Phosphorus	ppm ASTM D5185m 1150	<b>1084</b>	920	1023
Zinc	ppm ASTM D5185m 1270	<b>1122</b>	1098	1191
Sulfur	ppm ASTM D5185m 2060	<b>2764</b>	2949	2747

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>8</b>	16	9
Sodium	ppm ASTM D5185m	<b>5</b>	2	1
Potassium	ppm ASTM D5185m >20	<b>&lt;1</b>	1	0

## INFRA-RED

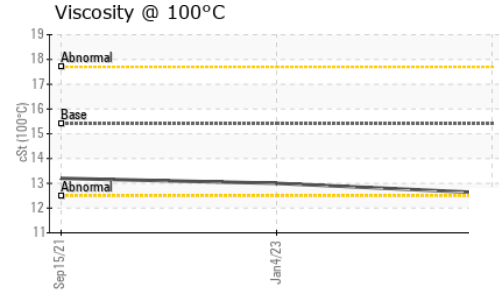
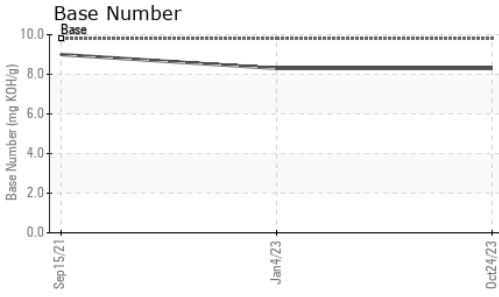
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	<b>1.5</b>	0.2	0.3
Nitration	Abs/cm *ASTM D7624 >20	<b>7.5</b>	5.0	5
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>20.7</b>	17.7	17.2

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>14.2</b>	13.2	12.2
Base Number (BN)	mg KOH/g ASTM D2896 9.8	<b>8.3</b>	8.3	9



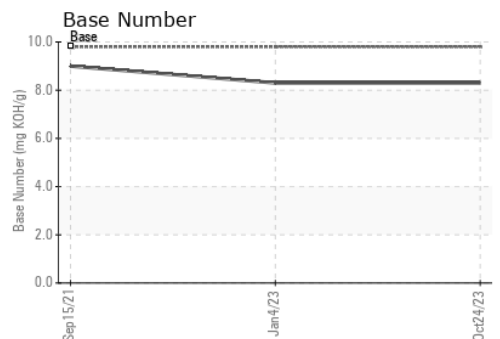
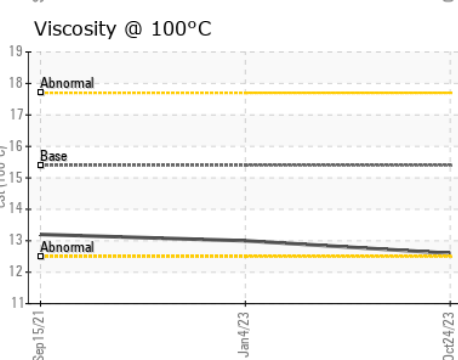
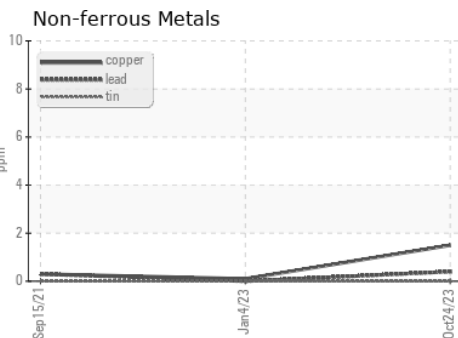
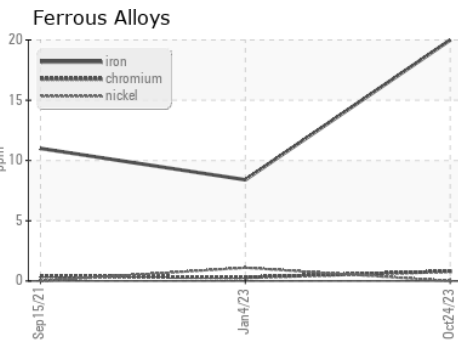
# OIL ANALYSIS REPORT



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>12.6</b>	13.0	13.2

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0097226 **Received** : 31 Oct 2023  
**Lab Number** : **05994068** **Diagnosed** : 31 Oct 2023  
**Unique Number** : 10722428 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 072 - Americus - Transwaste**  
 361 McMath Mill Road  
 Americus, GA  
 US 31719  
 Contact: RICHARD HEINZERLING  
 richard.heinzerling@gflenv.com  
 T: (229)924-3669  
 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)