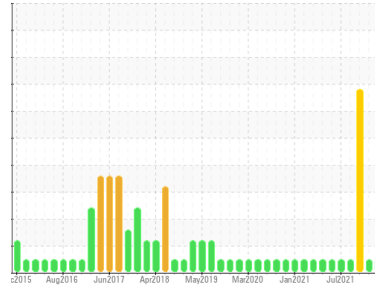




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**10458**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 15W40 (7 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>GFL0090099</b>	GFL0086248	GFL0057653
Sample Date	Client Info	<b>03 Oct 2023</b>	22 Jun 2023	27 Apr 2023
Machine Age	hrs	<b>25762</b>	34086	34086
Oil Age	hrs	<b>600</b>	25275	24976
Oil Changed	Client Info	<b>Changed</b>	N/A	N/A
Sample Status		<b>NORMAL</b>	NORMAL	SEVERE

## CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >3.0	<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 >75	<b>7</b>	31	154
Chromium	ppm ASTM D5185m >5	<b>&lt;1</b>	2	5
Nickel	ppm ASTM D5185m >4	<b>0</b>	<1	<1
Titanium	ppm ASTM D5185m >2	<b>0</b>	<1	<1
Silver	ppm ASTM D5185m >2	<b>0</b>	<1	0
Aluminum	ppm ASTM D5185m >15	<b>1</b>	2	13
Lead	ppm ASTM D5185m >25	<b>0</b>	2	1
Copper	ppm ASTM D5185m >100	<b>&lt;1</b>	6	53
Tin	ppm ASTM D5185m >4	<b>0</b>	<1	1
Antimony	ppm ASTM D5185m	<b>---</b>	---	---
Vanadium	ppm ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm ASTM D5185m	<b>0</b>	<1	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 0	<b>4</b>	17	14
Barium	ppm ASTM D5185m 0	<b>0</b>	4	0
Molybdenum	ppm ASTM D5185m 60	<b>58</b>	63	59
Manganese	ppm ASTM D5185m 0	<b>&lt;1</b>	1	3
Magnesium	ppm ASTM D5185m 1010	<b>981</b>	860	698
Calcium	ppm ASTM D5185m 1070	<b>1082</b>	1132	1187
Phosphorus	ppm ASTM D5185m 1150	<b>1031</b>	985	917
Zinc	ppm ASTM D5185m 1270	<b>1293</b>	1201	1136
Sulfur	ppm ASTM D5185m 2060	<b>3196</b>	3384	2227

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>4</b>	4	13
Sodium	ppm ASTM D5185m	<b>&lt;1</b>	1	1
Potassium	ppm ASTM D5185m >20	<b>&lt;1</b>	4	13

## INFRA-RED

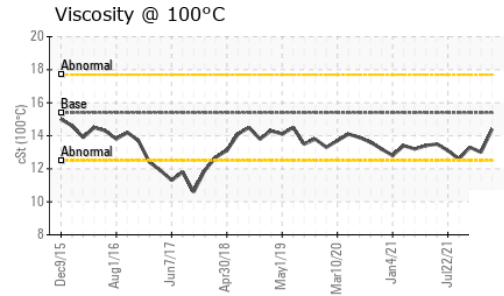
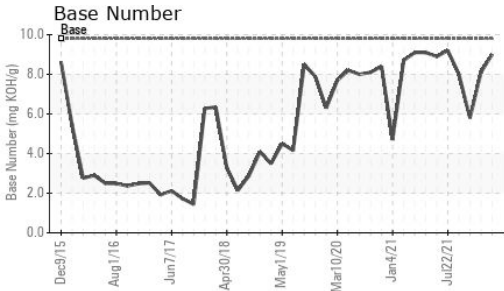
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >6	<b>0.3</b>	0.9	2
Nitration	Abs/cm *ASTM D7624 >20	<b>6.0</b>	8.2	11.8
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>18.0</b>	19.4	22.6

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>13.8</b>	14.1	18.6
Base Number (BN)	mg KOH/g ASTM D2896 9.8	<b>9.0</b>	8.1	5.8



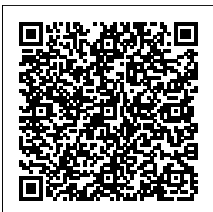
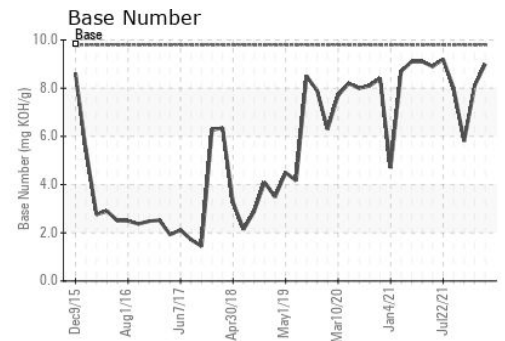
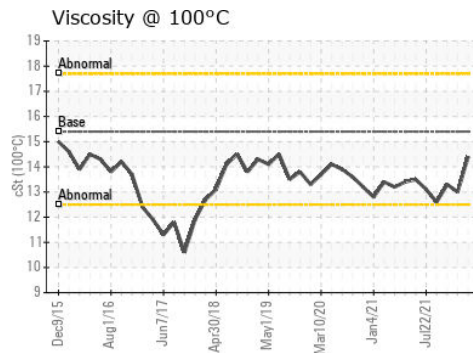
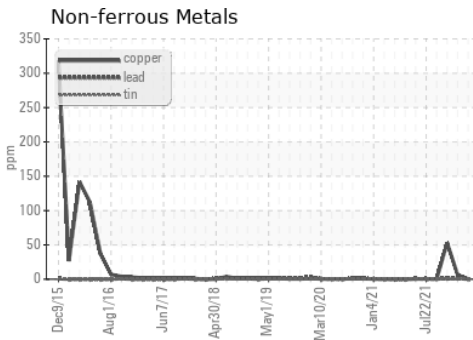
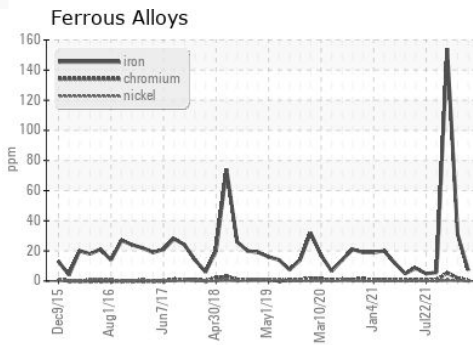
# OIL ANALYSIS REPORT



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	<b>14.4</b>	13.0	13.3

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0090099 **Received** : 05 Oct 2023  
**Lab Number** : **05970160** **Diagnosed** : 05 Oct 2023  
**Unique Number** : 10682110 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 030 - Conway Myrtle Beach**  
 3010 HWY 378  
 Conway, SC  
 US 29527  
**Contact: CHET STROSCHINE**  
 cstroschine@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)

T:  
F: