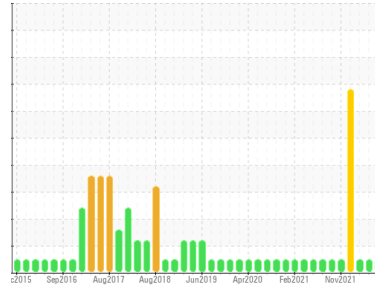




# OIL ANALYSIS REPORT

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>GFL0090110</b>	GFL0090099	GFL0086248
Sample Date	Client Info	<b>10 Oct 2023</b>	03 Oct 2023	22 Jun 2023
Machine Age	hrs	<b>25762</b>	25762	34086
Oil Age	hrs	<b>600</b>	600	25275
Oil Changed	Client Info	<b>Changed</b>	Changed	N/A
Sample Status		<b>NORMAL</b>	NORMAL	NORMAL

## 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>13</b>	7	31
Chromium	ppm ASTM D5185m >5	<b>&lt;1</b>	<1	2
Nickel	ppm ASTM D5185m >4	<b>&lt;1</b>	0	<1
Titanium	ppm ASTM D5185m >2	<b>&lt;1</b>	0	<1
Silver	ppm ASTM D5185m >2	<b>0</b>	0	<1
Aluminum	ppm ASTM D5185m >15	<b>3</b>	1	2
Lead	ppm ASTM D5185m >25	<b>0</b>	0	2
Copper	ppm ASTM D5185m >100	<b>1</b>	<1	6
Tin	ppm ASTM D5185m >4	<b>&lt;1</b>	0	<1
Vanadium	ppm ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm ASTM D5185m	<b>&lt;1</b>	0	<1

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 0	<b>4</b>	4	17
Barium	ppm ASTM D5185m 0	<b>10</b>	0	4
Molybdenum	ppm ASTM D5185m 60	<b>58</b>	58	63
Manganese	ppm ASTM D5185m 0	<b>0</b>	<1	1
Magnesium	ppm ASTM D5185m 1010	<b>855</b>	981	860
Calcium	ppm ASTM D5185m 1070	<b>1001</b>	1082	1132
Phosphorus	ppm ASTM D5185m 1150	<b>1013</b>	1031	985
Zinc	ppm ASTM D5185m 1270	<b>1119</b>	1293	1201
Sulfur	ppm ASTM D5185m 2060	<b>2872</b>	3196	3384

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>6</b>	4	4
Sodium	ppm ASTM D5185m	<b>0</b>	<1	1
Potassium	ppm ASTM D5185m >20	<b>3</b>	<1	4

## INFRA-RED

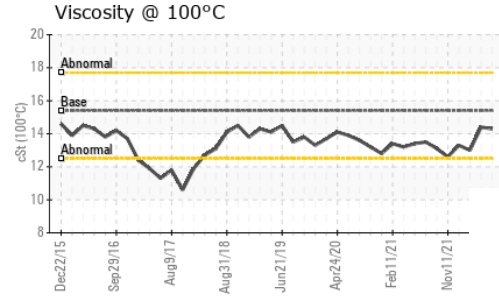
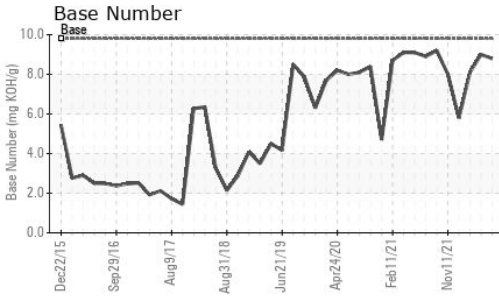
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >6	<b>0.3</b>	0.3	0.9
Nitration	Abs/cm *ASTM D7624 >20	<b>5.9</b>	6.0	8.2
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>17.5</b>	18.0	19.4

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>13.2</b>	13.8	14.1
Base Number (BN)	mg KOH/g ASTM D2896 9.8	<b>8.8</b>	9.0	8.1



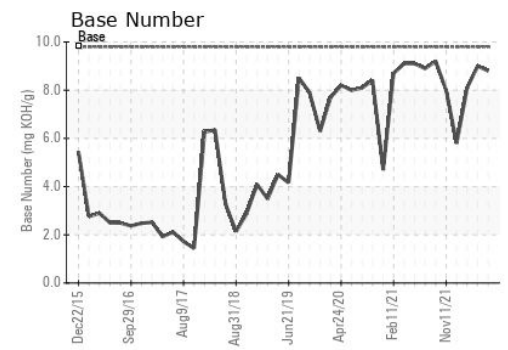
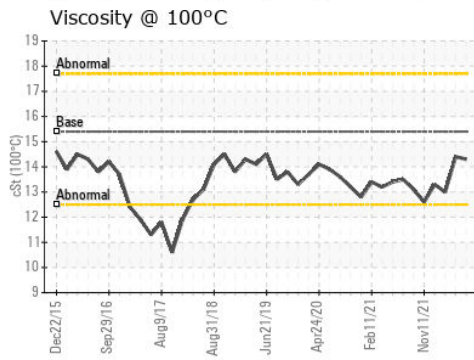
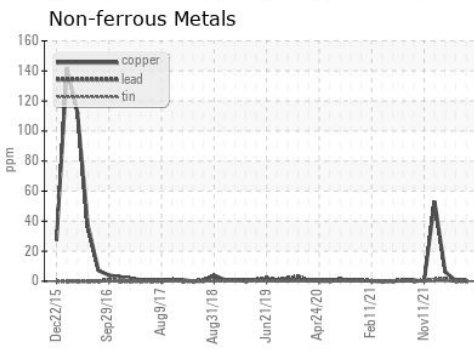
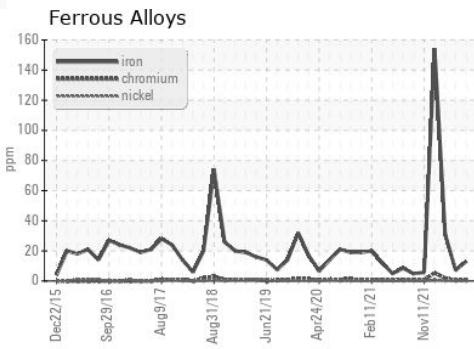
# OIL ANALYSIS REPORT



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	14.3	14.4

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0090110 **Received** : 17 Oct 2023  
**Lab Number** : 05981119 **Diagnosed** : 18 Oct 2023  
**Unique Number** : 10698414 **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)