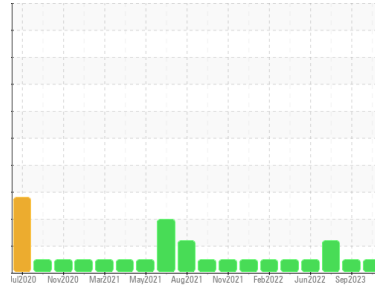




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**11399**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 15W40 (30 QTS)**

## 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>GFL0101747</b>	GFL0081016	GFL0070774
Sample Date	Client Info	<b>29 Feb 2024</b>	04 Sep 2023	20 Mar 2023
Machine Age	hrs	<b>8663</b>	7555	6280
Oil Age	hrs	<b>0</b>	600	600
Oil Changed	Client Info	<b>N/A</b>	Changed	Changed
Sample Status		<b>NORMAL</b>	NORMAL	ABNORMAL

## CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >5	<b>&lt;1.0</b>	<1.0	<1.0
Water	WC Method >0.2	<b>NEG</b>	NEG	NEG
Glycol	WC Method	<b>NEG</b>	NEG	NEG

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >100	<b>18</b>	15	69
Chromium	ppm ASTM D5185m >20	<b>&lt;1</b>	<1	2
Nickel	ppm ASTM D5185m >4	<b>0</b>	<1	0
Titanium	ppm ASTM D5185m	<b>0</b>	0	0
Silver	ppm ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm ASTM D5185m >20	<b>9</b>	4	18
Lead	ppm ASTM D5185m >40	<b>0</b>	0	0
Copper	ppm ASTM D5185m >330	<b>&lt;1</b>	<1	2
Tin	ppm ASTM D5185m >15	<b>&lt;1</b>	<1	<1
Vanadium	ppm ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 0	<b>4</b>	0	<1
Barium	ppm ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m 60	<b>58</b>	65	67
Manganese	ppm ASTM D5185m 0	<b>&lt;1</b>	<1	1
Magnesium	ppm ASTM D5185m 1010	<b>921</b>	975	1033
Calcium	ppm ASTM D5185m 1070	<b>966</b>	1108	1155
Phosphorus	ppm ASTM D5185m 1150	<b>985</b>	1095	1092
Zinc	ppm ASTM D5185m 1270	<b>1237</b>	1333	1324
Sulfur	ppm ASTM D5185m 2060	<b>2656</b>	3381	3019

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>4</b>	3	9
Sodium	ppm ASTM D5185m	<b>&lt;1</b>	<1	4
Potassium	ppm ASTM D5185m >20	<b>20</b>	9	51

## INFRA-RED

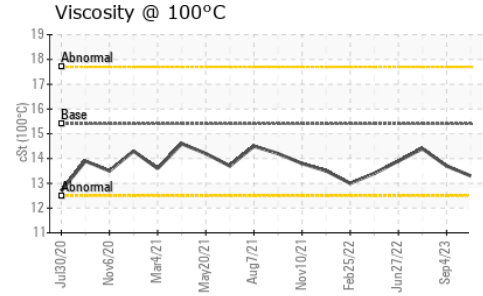
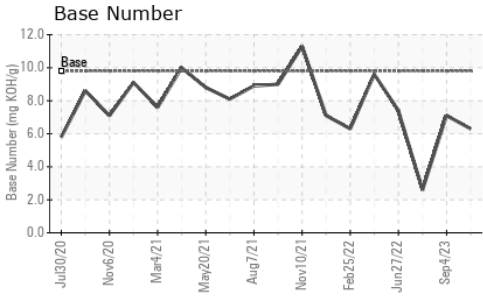
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	<b>0.2</b>	0.2	0.6
Nitration	Abs/cm *ASTM D7624 >20	<b>10.3</b>	9.4	17.5
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>21.8</b>	19.1	30.2

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>20.9</b>	17.4	36.0
Base Number (BN)	mg KOH/g ASTM D2896 9.8	<b>6.3</b>	7.1	▲ 2.6



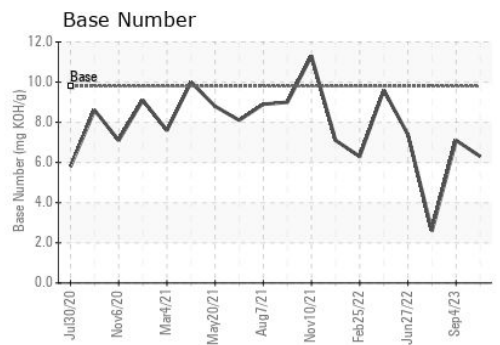
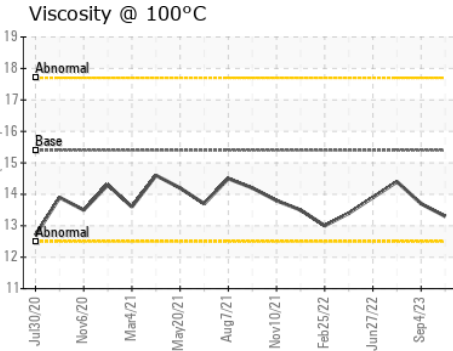
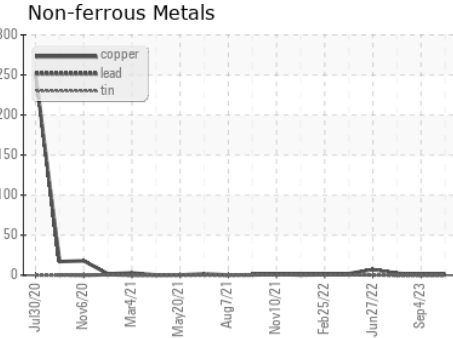
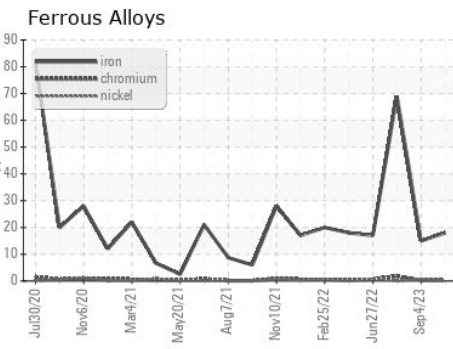
# OIL ANALYSIS REPORT



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>13.3</b>	13.7	14.4

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0101747  
**Lab Number** : **06105926**  
**Unique Number** : 10909423  
**Test Package** : FLEET  
**Received** : 01 Mar 2024  
**Tested** : 04 Mar 2024  
**Diagnosed** : 04 Mar 2024 - Wes Davis

**GFL Environmental - 030 - Conway Myrtle Beach**  
 3010 HWY 378  
 Conway, SC  
 US 29527  
 Contact: ARCILIO RUEZ  
 aruiz@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)