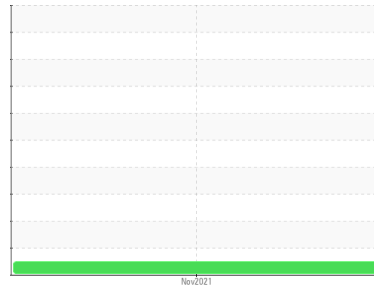




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area

**GFL029**

Machine Id

**NOT GIVEN GFL0036706**

Component

**Diesel Engine**

Fluid

**PETRO CANADA DURON SHP 15W40 (--- QTS)**

## 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>GFL0036706</b>	---	---
Sample Date	Client Info			<b>16 Nov 2021</b>	---	---
Machine Age	hrs	Client Info		<b>0</b>	---	---
Oil Age	hrs	Client Info		<b>0</b>	---	---
Oil Changed	Client Info			<b>N/A</b>	---	---
Sample Status				<b>NORMAL</b>	---	---

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

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	<b>33</b>	---	---
Chromium	ppm	ASTM D5185m	>20	<b>2</b>	---	---
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	---	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Silver	ppm	ASTM D5185m	>3	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m	>20	<b>4</b>	---	---
Lead	ppm	ASTM D5185m	>40	<b>0</b>	---	---
Copper	ppm	ASTM D5185m	>330	<b>1</b>	---	---
Tin	ppm	ASTM D5185m	>15	<b>0</b>	---	---
Antimony	ppm	ASTM D5185m		<b>2</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	---	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	---	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<b>6</b>	---	---
Barium	ppm	ASTM D5185m	0	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m	60	<b>55</b>	---	---
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185m	1010	<b>951</b>	---	---
Calcium	ppm	ASTM D5185m	1070	<b>1164</b>	---	---
Phosphorus	ppm	ASTM D5185m	1150	<b>955</b>	---	---
Zinc	ppm	ASTM D5185m	1270	<b>1218</b>	---	---
Sulfur	ppm	ASTM D5185m	2060	<b>3479</b>	---	---

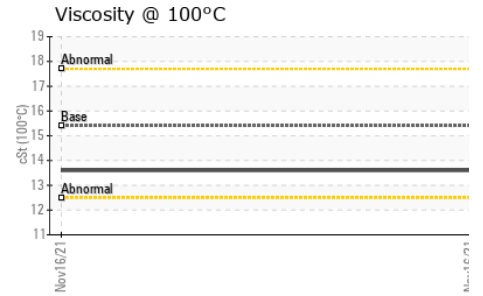
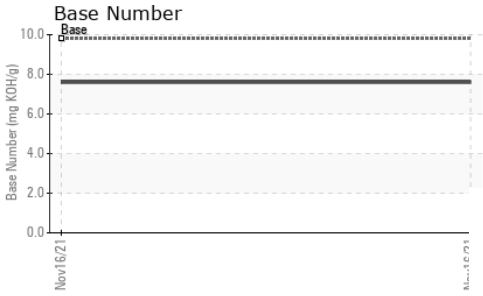
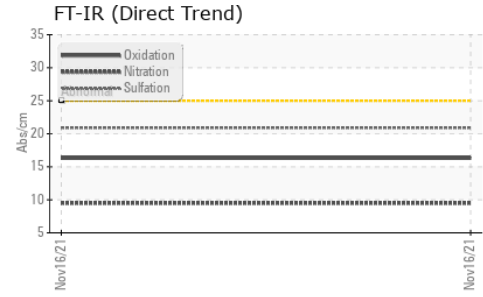
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>6</b>	---	---
Sodium	ppm	ASTM D5185m		<b>6</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	---	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>0.9</b>	---	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.5</b>	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.9</b>	---	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.3</b>	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>7.6</b>	---	---



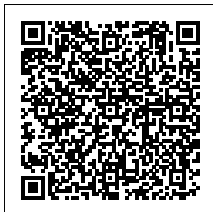
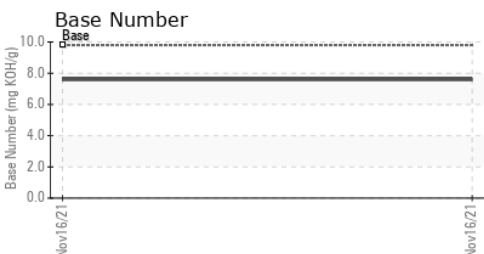
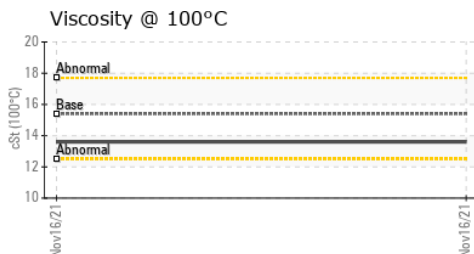
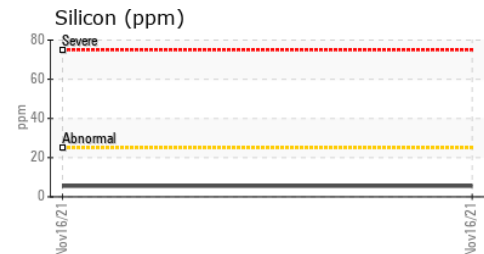
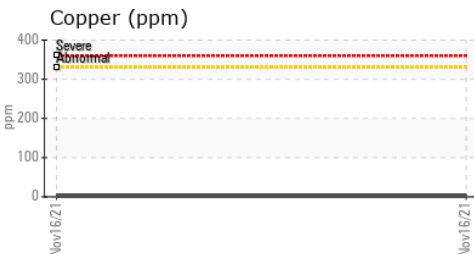
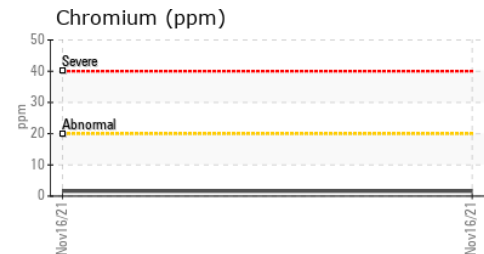
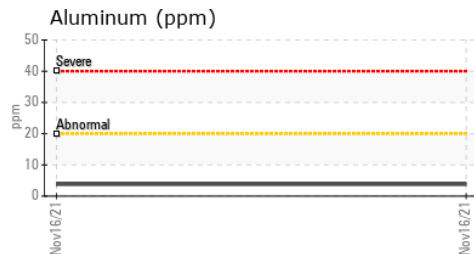
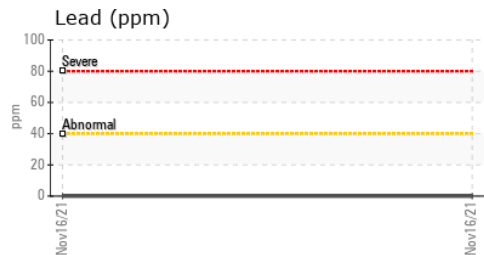
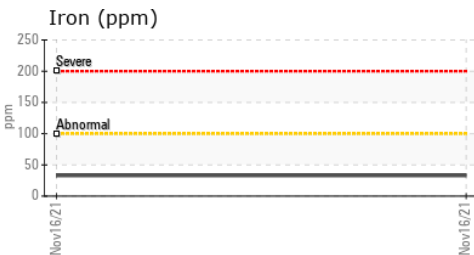
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	13.6	---

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0036706      **Received** : 17 Nov 2021  
**Lab Number** : 05403293      **Tested** : 18 Nov 2021  
**Unique Number** : 9747456      **Diagnosed** : 18 Nov 2021 - Wes Davis  
**Test Package** : MOB1+

**GFL Environmental - SIF Number**  
 US  
 Contact: Service Manager

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)