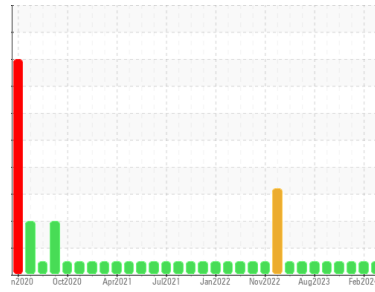




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**(YA154653)**

Machine Id

**2866**

Component

**Diesel Engine**

Fluid

**PETRO CANADA DURON SHP 15W40 (12 GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

Metal levels are typical for a new component breaking in.

### 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>GFL0079628</b>	GFL0112922	GFL0088513
Sample Date	Client Info		<b>05 Jun 2024</b>	26 Feb 2024	19 Feb 2024
Machine Age	hrs	Client Info	<b>691</b>	691	691
Oil Age	hrs	Client Info	<b>420</b>	529	494
Oil Changed	Client Info		<b>N/A</b>	N/A	Not Changd
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
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 >165	<b>11</b>	10	8
Chromium	ppm	ASTM D5185m >5	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m >4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m >2	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>4</b>	2	3
Lead	ppm	ASTM D5185m >150	<b>2</b>	0	<1
Copper	ppm	ASTM D5185m >90	<b>2</b>	1	<1
Tin	ppm	ASTM D5185m >5	<b>&lt;1</b>	0	<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>0</b>	1	2
Barium	ppm	ASTM D5185m 0	<b>1</b>	8	0
Molybdenum	ppm	ASTM D5185m 60	<b>66</b>	63	60
Manganese	ppm	ASTM D5185m 0	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m 1010	<b>984</b>	875	951
Calcium	ppm	ASTM D5185m 1070	<b>1159</b>	1014	1043
Phosphorus	ppm	ASTM D5185m 1150	<b>1064</b>	963	1075
Zinc	ppm	ASTM D5185m 1270	<b>1326</b>	1142	1264
Sulfur	ppm	ASTM D5185m 2060	<b>3323</b>	2925	2968

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >35	<b>5</b>	4	4
Sodium	ppm	ASTM D5185m	<b>&lt;1</b>	1	4
Potassium	ppm	ASTM D5185m >20	<b>8</b>	33	7

## INFRA-RED

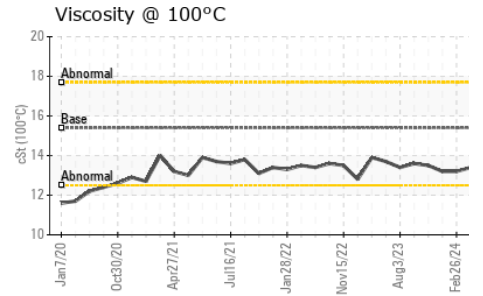
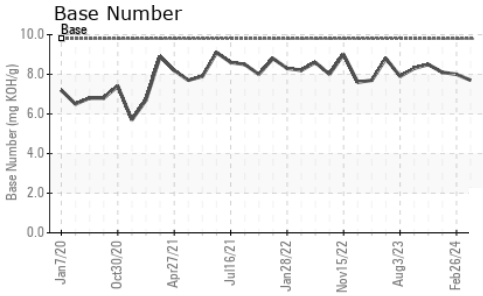
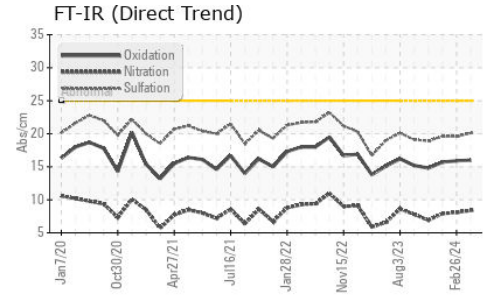
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >7.5	<b>0.3</b>	0.3	0.3
Nitration	Abs/cm	*ASTM D7624 >20	<b>8.4</b>	8.1	7.9
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>20.1</b>	19.6	19.6

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>16.0</b>	15.9	15.7
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>7.7</b>	8.0	8.1



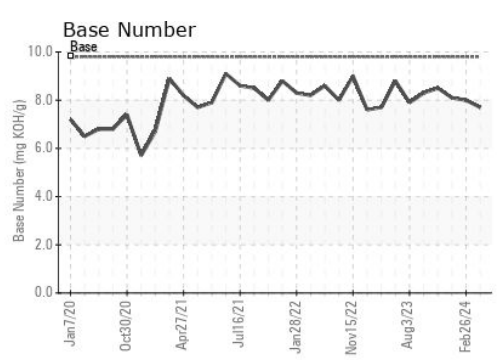
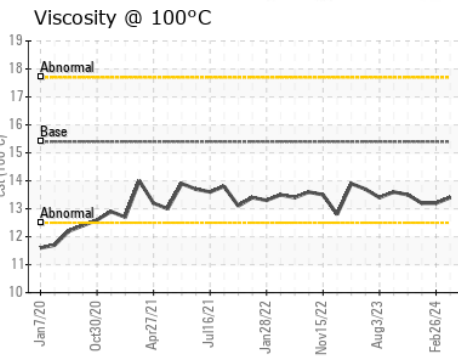
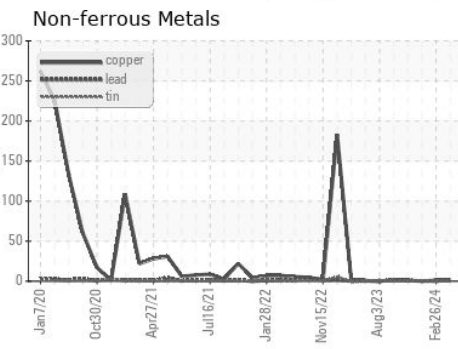
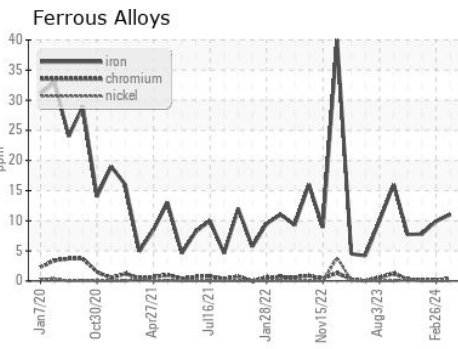
# OIL ANALYSIS REPORT



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	<b>13.4</b>	13.2	13.2

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0079628      **Received** : 05 Jun 2024  
**Lab Number** : **06200996**      **Tested** : 07 Jun 2024  
**Unique Number** : 11063119      **Diagnosed** : 07 Jun 2024 - Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 017 - Durham**  
 148 Stone Park Court  
 Durham, NC  
 US 27703  
 Contact: William Russel  
 william.russell@gflenv.com  
 T:  
 F: (919)598-1852

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)