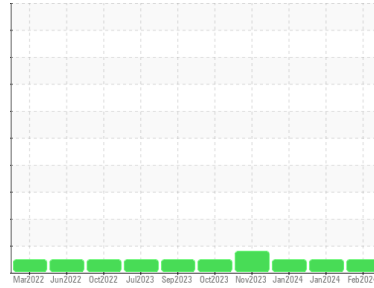




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**{UNASSIGNED}**

Machine Id  
**792M**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 15W40 (36 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>GFL0110081</b>	GFL0109995	GFL0104186
Sample Date	Client Info	<b>02 Feb 2024</b>	16 Jan 2024	04 Jan 2024
Machine Age	hrs	<b>17185</b>	17164	17083
Oil Age	hrs	<b>600</b>	600	0
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 >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>7</b>	37	5
Chromium	ppm ASTM D5185m >20	<b>&lt;1</b>	1	0
Nickel	ppm ASTM D5185m >4	<b>0</b>	0	0
Titanium	ppm ASTM D5185m	<b>0</b>	<1	0
Silver	ppm ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm ASTM D5185m >20	<b>2</b>	3	<1
Lead	ppm ASTM D5185m >40	<b>0</b>	3	0
Copper	ppm ASTM D5185m >330	<b>0</b>	1	<1
Tin	ppm ASTM D5185m >15	<b>0</b>	0	0
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>	<1	0
Barium	ppm ASTM D5185m 0	<b>5</b>	0	0
Molybdenum	ppm ASTM D5185m 60	<b>55</b>	53	53
Manganese	ppm ASTM D5185m 0	<b>0</b>	<1	0
Magnesium	ppm ASTM D5185m 1010	<b>858</b>	865	932
Calcium	ppm ASTM D5185m 1070	<b>909</b>	1001	1023
Phosphorus	ppm ASTM D5185m 1150	<b>845</b>	820	939
Zinc	ppm ASTM D5185m 1270	<b>1145</b>	1069	1260
Sulfur	ppm ASTM D5185m 2060	<b>2754</b>	2514	2839

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>4</b>	8	2
Sodium	ppm ASTM D5185m	<b>0</b>	3	4
Potassium	ppm ASTM D5185m >20	<b>2</b>	<1	2

## INFRA-RED

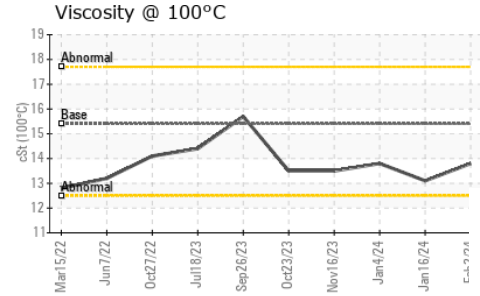
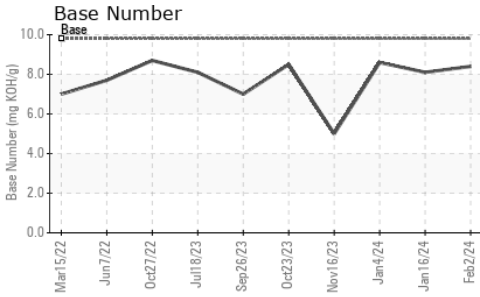
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	<b>0</b>	1.1	0.3
Nitration	Abs/cm *ASTM D7624 >20	<b>4.4</b>	13.7	8.2
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>18.0</b>	23.5	19.0

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>13.2</b>	24.8	16.1
Base Number (BN)	mg KOH/g ASTM D2896 9.8	<b>8.4</b>	8.1	8.6



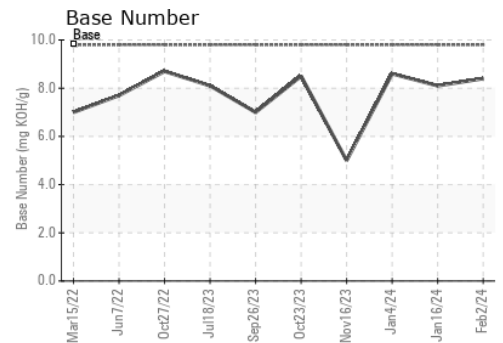
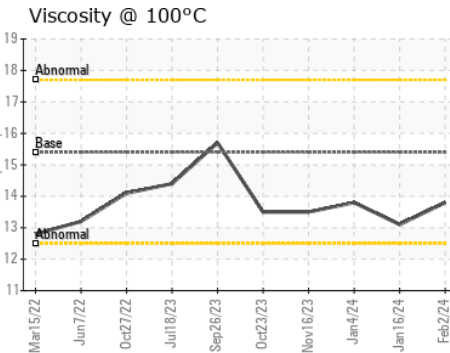
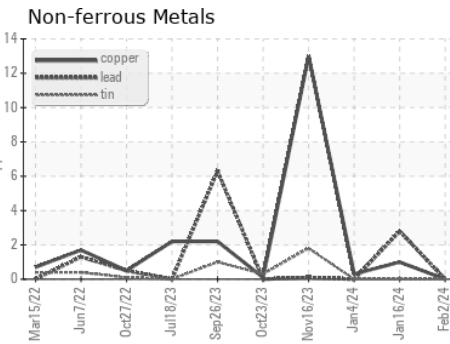
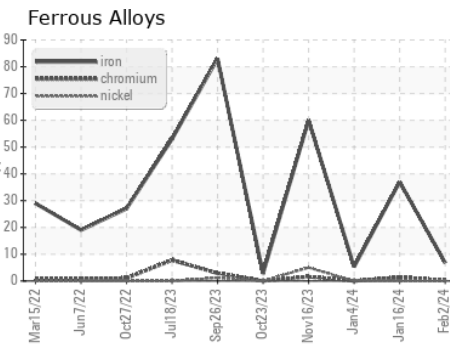
# OIL ANALYSIS REPORT



PARAMETER	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>13.8</b>	13.1	13.8

## GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : GFL0110081  
 Lab Number : **06081143**  
 Unique Number : 10863234  
 Test Package : FLEET

GFL Environmental - 410 - Michigan West  
 39000 Van Born Rd  
 Wayne, MI  
 US 48184

Contact: Belal Dgheish  
 bdgheish@gflenv.com

T: (734)714-2340

F:

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)