



# OIL ANALYSIS REPORT

Sample Rating Trend

FUEL



Machine Id

**T314**

Component

**Diesel Engine**

Fluid

**PETRO CANADA DURON SHP 10W30 (--- GAL)**



## DIAGNOSIS

### ▲ Recommendation

We advise that you check the fuel injection system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

### Wear

All component wear rates are normal.

### ▲ Contamination

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

### Fluid Condition

The oil is no longer serviceable due to the presence of contaminants.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0853166</b>	---	---
Sample Date	Client Info		<b>20 Mar 2024</b>	---	---
Machine Age	kms	Client Info	<b>229862</b>	---	---
Oil Age	kms	Client Info	<b>0</b>	---	---
Oil Changed	Client Info		<b>Changed</b>	---	---
Sample Status			<b>SEVERE</b>	---	---

## CONTAMINATION

	method	limit/base	current	history1	history2
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 D5185(m)	>90	<b>55</b>	---
Chromium	ppm	ASTM D5185(m)	>20	<b>4</b>	---
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	---
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	---
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	---
Aluminum	ppm	ASTM D5185(m)	>20	<b>5</b>	---
Lead	ppm	ASTM D5185(m)	>40	<b>6</b>	---
Copper	ppm	ASTM D5185(m)	>330	<b>1</b>	---
Tin	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	---
Antimony	ppm	ASTM D5185(m)		<b>0</b>	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	---
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	---
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	2	<b>31</b>	---
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	---
Molybdenum	ppm	ASTM D5185(m)	50	<b>2</b>	---
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	---
Magnesium	ppm	ASTM D5185(m)	950	<b>591</b>	---
Calcium	ppm	ASTM D5185(m)	1050	<b>1066</b>	---
Phosphorus	ppm	ASTM D5185(m)	995	<b>538</b>	---
Zinc	ppm	ASTM D5185(m)	1180	<b>627</b>	---
Sulfur	ppm	ASTM D5185(m)	2600	<b>1924</b>	---
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	---

## CONTAMINANTS

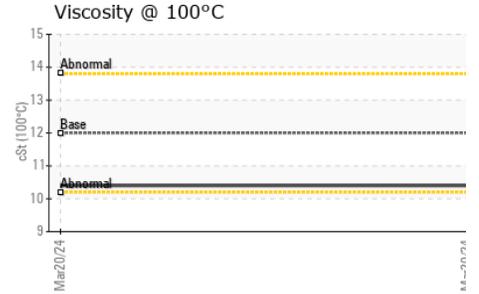
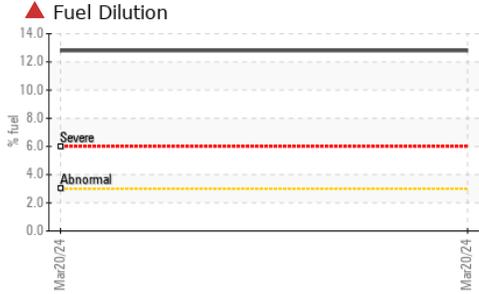
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	<b>4</b>	---
Sodium	ppm	ASTM D5185(m)		<b>4</b>	---
Potassium	ppm	ASTM D5185(m)	>20	<b>7</b>	---
Fuel	%	ASTM D7593*	>3.0	<b>▲ 12.8</b>	---

## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>6	<b>0.6</b>	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>20.9</b>	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>36.7</b>	---



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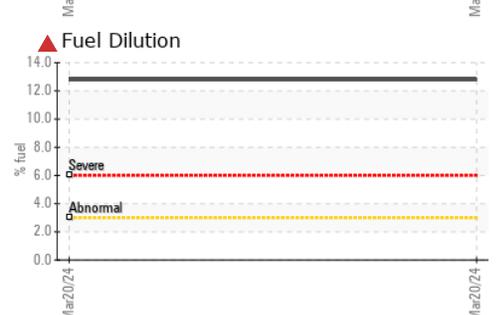
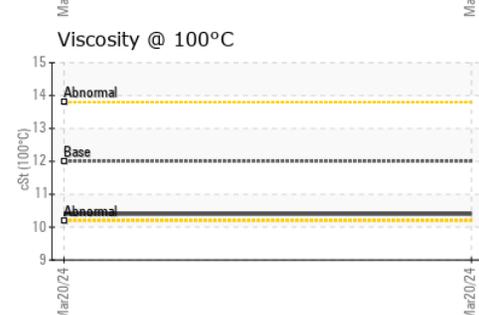
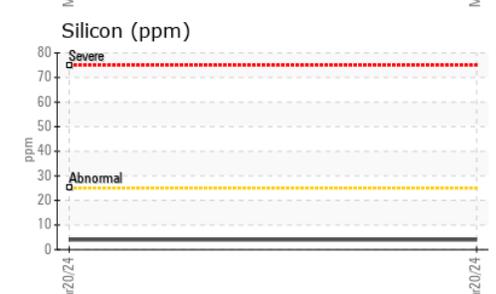
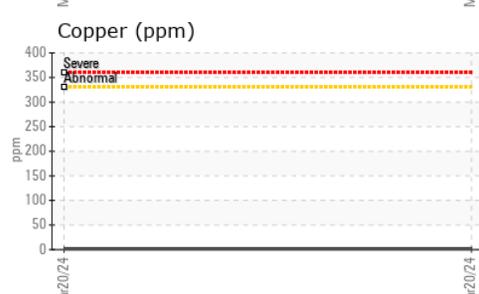
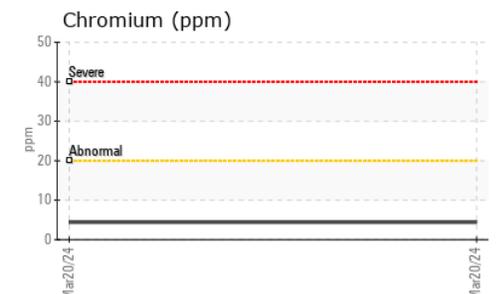
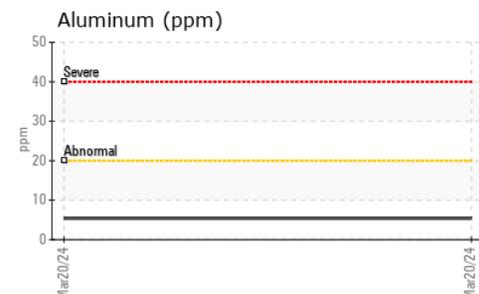
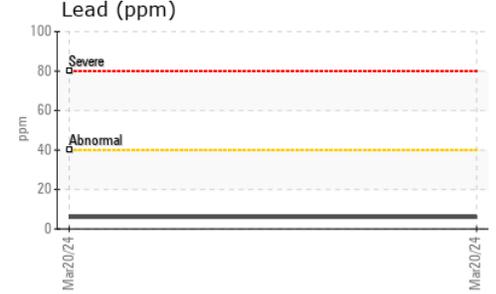
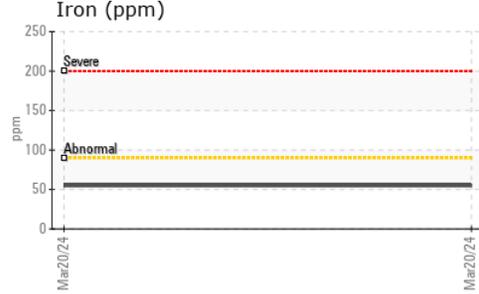


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>55.2</b>	---	---

VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	---	---
Free Water	scalar	Visual*		<b>NEG</b>	---	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	<b>10.4</b>	---	---

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0853166 **Received** : 26 Mar 2024  
**Lab Number** : **02624534** **Tested** : 27 Mar 2024  
**Unique Number** : 5749653 **Diagnosed** : 27 Mar 2024 - Kevin Marson  
**Test Package** : MOB 1 ( Additional Tests: FuelDilution, PercentFuel )

**Rush Truck Centres**  
 7450 Torbram Rd.  
 Mississauga, ON  
 CA L4T 1G9  
 Contact: Cesar Uver  
 uverc@rushenterprises.com

To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.