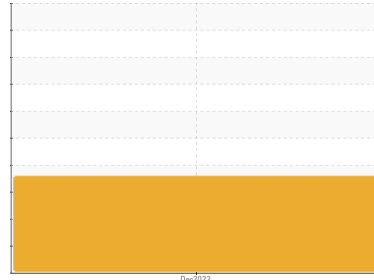


Area  
**SHARP BUS LINES**  
Machine Id  
**INTERNATIONAL 1092**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**



**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**  
Iron ppm levels are abnormal. Cylinder, crank, or cam shaft wear is indicated.

**Contamination**  
There is a high amount of fuel present in the oil. Light concentration of carbon/soot present in the oil. Tests confirm the presence of fuel in the oil.

**Fluid Condition**  
The oil is no longer serviceable as a result of the abnormal and/or severe wear.

**SAMPLE INFORMATION** method limit/base current history1 history2

Sample Number	Client Info		<b>PC0081576</b>	---	---
Sample Date	Client Info		<b>21 Dec 2023</b>	---	---
Machine Age	hrs	Client Info	<b>211709</b>	---	---
Oil Age	hrs	Client Info	<b>7348</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

PQ	ASTM D8184*		<b>0</b>	---	---
Iron	ppm	ASTM D5185(m) >100	<b>105</b>	---	---
Chromium	ppm	ASTM D5185(m) >20	<b>1</b>	---	---
Nickel	ppm	ASTM D5185(m) >4	<b>1</b>	---	---
Titanium	ppm	ASTM D5185(m)	<b>0</b>	---	---
Silver	ppm	ASTM D5185(m) >3	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185(m) >20	<b>10</b>	---	---
Lead	ppm	ASTM D5185(m) >40	<b>1</b>	---	---
Copper	ppm	ASTM D5185(m) >330	<b>1</b>	---	---
Tin	ppm	ASTM D5185(m) >15	<b>0</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) 0	<b>1</b>	---	---
Barium	ppm	ASTM D5185(m) 0	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185(m) 60	<b>60</b>	---	---
Manganese	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185(m) 1010	<b>906</b>	---	---
Calcium	ppm	ASTM D5185(m) 1070	<b>988</b>	---	---
Phosphorus	ppm	ASTM D5185(m) 1150	<b>947</b>	---	---
Zinc	ppm	ASTM D5185(m) 1270	<b>1080</b>	---	---
Sulfur	ppm	ASTM D5185(m) 2060	<b>2409</b>	---	---
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	---	---

**CONTAMINANTS** method limit/base current history1 history2

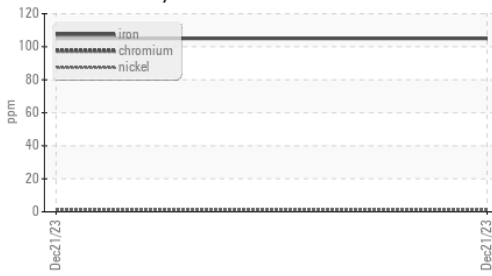
Silicon	ppm	ASTM D5185(m) >25	<b>5</b>	---	---
Sodium	ppm	ASTM D5185(m)	<b>2</b>	---	---
Potassium	ppm	ASTM D5185(m) >20	<b>2</b>	---	---
Fuel	%	ASTM D7593* >2.0	<b>6.9</b>	---	---

**INFRA-RED** method limit/base current history1 history2

Soot %	%	ASTM D7844* >3	<b>3.3</b>	---	---
Nitration	Abs/cm	ASTM D7624* >20	<b>14.0</b>	---	---
Sulfation	Abs/.1mm	ASTM D7415* >30	<b>26.9</b>	---	---

# OIL ANALYSIS REPORT

## ▲ Ferrous Alloys



## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs./1mm ASTM D7414*	>25	19.7	---	---

## VISUAL

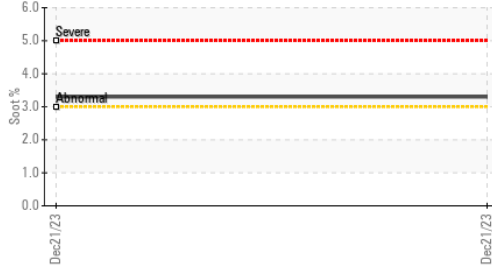
method	limit/base	current	history1	history2	
Emulsified Water	scalar Visual*	>0.2	NEG	---	---
Free Water	scalar Visual*		NEG	---	---

## FLUID PROPERTIES

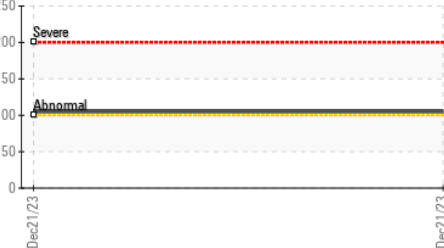
method	limit/base	current	history1	history2	
Visc @ 40°C	cSt ASTM D7279(m)	113.9	101	---	---
Visc @ 100°C	cSt ASTM D7279(m)	15.4	14.2	---	---
Viscosity Index (VI)	Scale ASTM D2270*	142	143	---	---

## GRAPHS

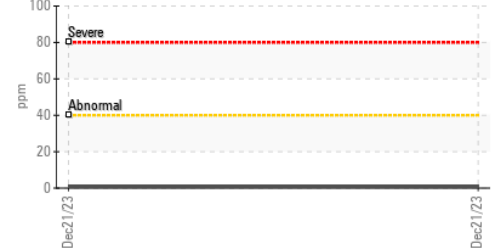
## ▲ Soot %



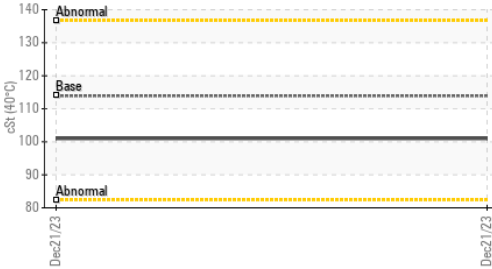
## ▲ Iron (ppm)



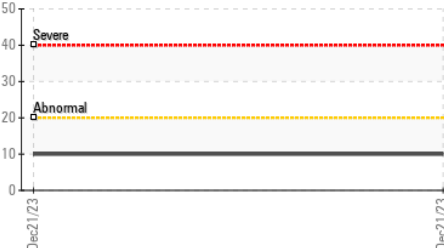
## Lead (ppm)



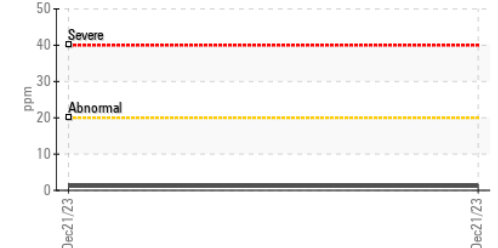
## ● Viscosity @ 40°C



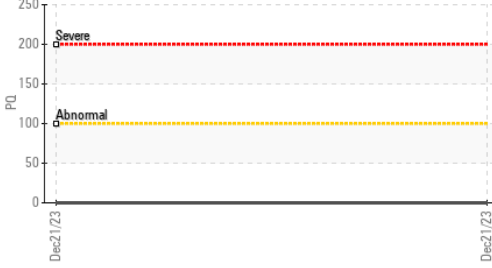
## Aluminum (ppm)



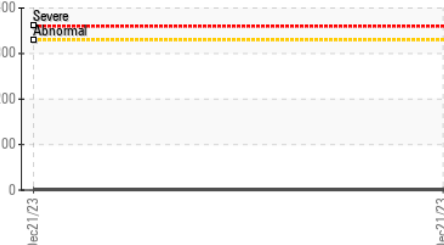
## Chromium (ppm)



## PQ



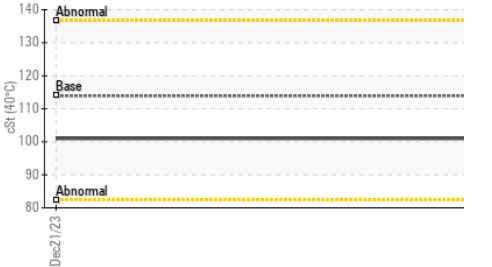
## Copper (ppm)



## Silicon (ppm)



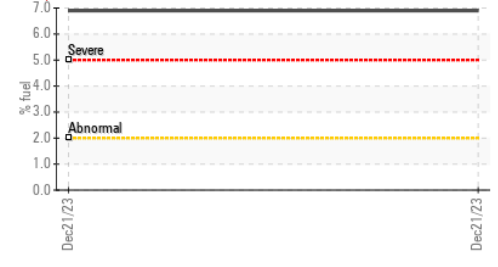
## ● Viscosity @ 40°C



## ● Viscosity @ 100°C



## ● Fuel Dilution



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0081576 **Received** : 25 Jan 2024  
**Lab Number** : 02611348 **Diagnosed** : 29 Jan 2024  
**Unique Number** : 5720443 **Diagnostician** : Bill Quesnel  
**Test Package** : MOB 1 ( Additional Tests: FuelDilution, KV40, PercentFuel, PQ, VI )

**ICSB904 - Kitchener**  
 280 Shoemaker Street  
 Kitchener, ON  
 CA N2E 3E1  
 Contact: Service Manager

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.

T:  
F: