

Area  
**SHARP BUS LINES**  
Machine Id  
**INTERNATIONAL 1093**  
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>PC0081575</b>	---	---
Sample Date	Client Info			<b>21 Dec 2023</b>	---	---
Machine Age	kms	Client Info		<b>214367</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>	---	---

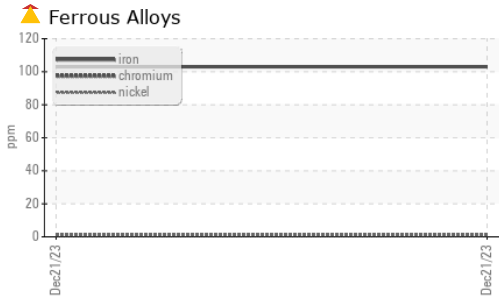
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		<b>0</b>	---	---
Iron	ppm	ASTM D5185(m)	>100	<b>103</b>	---	---
Chromium	ppm	ASTM D5185(m)	>20	<b>1</b>	---	---
Nickel	ppm	ASTM D5185(m)	>4	<b>1</b>	---	---
Titanium	ppm	ASTM D5185(m)		<b>0</b>	---	---
Silver	ppm	ASTM D5185(m)	>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>2</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>59</b>	---	---
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185(m)	1010	<b>898</b>	---	---
Calcium	ppm	ASTM D5185(m)	1070	<b>982</b>	---	---
Phosphorus	ppm	ASTM D5185(m)	1150	<b>938</b>	---	---
Zinc	ppm	ASTM D5185(m)	1270	<b>1077</b>	---	---
Sulfur	ppm	ASTM D5185(m)	2060	<b>2397</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>3.5</b>	---	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>14.8</b>	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>28.0</b>	---	---

# OIL ANALYSIS REPORT

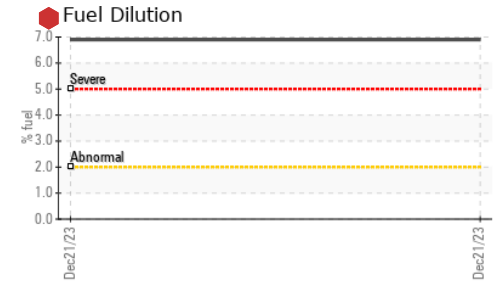
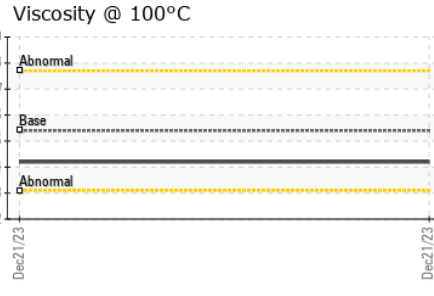
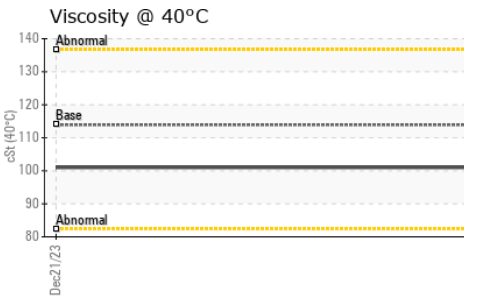
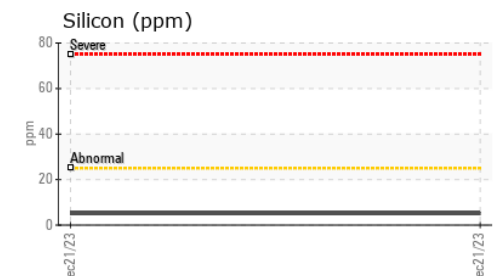
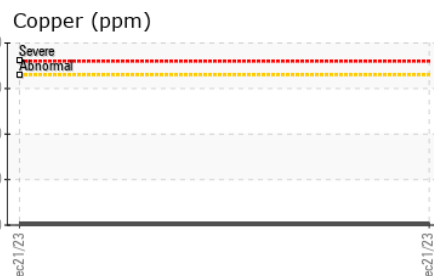
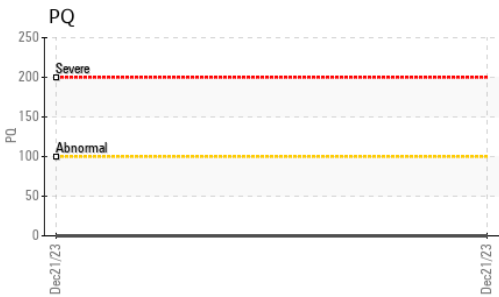
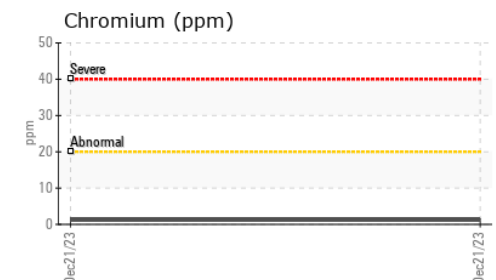
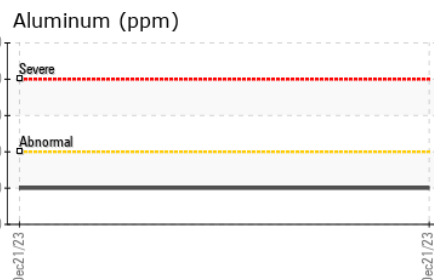
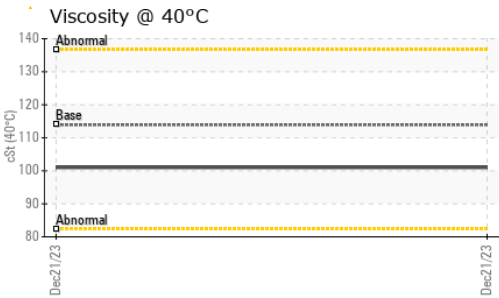
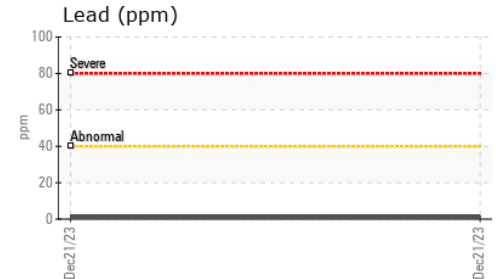
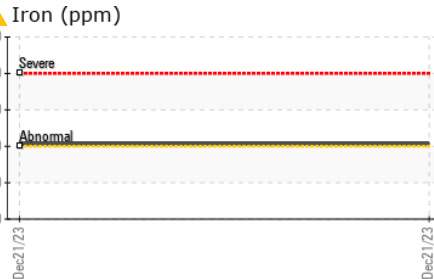
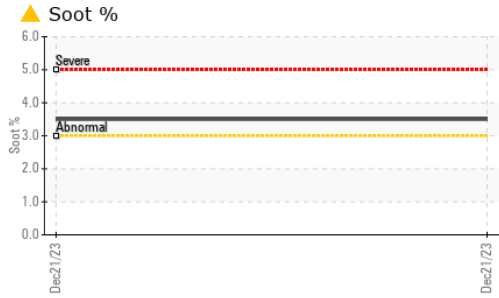


FLUID DEGRADATION	method	limit/base	current	history1	history2	
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>21.0</b>	---	---

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 @ 40°C	cSt	ASTM D7279(m)	113.9	<b>101</b>	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	<b>14.2</b>	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	142	<b>143</b>	---	---

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0081575 **Received** : 25 Jan 2024  
**Lab Number** : 02611347 **Diagnosed** : 29 Jan 2024  
**Unique Number** : 5720442 **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.

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F: