



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**52972**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 10W30 (--- LTR)**

## RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0930264</b>	WC0892095	---
Sample Date		Client Info		<b>06 May 2024</b>	06 Feb 2024	---
Machine Age	mls	Client Info		<b>67994</b>	0	---
Oil Age	mls	Client Info		<b>33961</b>	0	---
Filter Age	mls	Client Info		<b>33961</b>	0	---
Oil Changed		Client Info		<b>Changed</b>	Changed	---
Filter Changed		Client Info		<b>Changed</b>	N/A	---
Sample Status				<b>NORMAL</b>	NORMAL	---

## WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>100	<b>46</b>	39	---
Chromium	ppm	ASTM D5185(m)	>20	<b>2</b>	2	---
Nickel	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	<1	---
Titanium	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	---
Silver	ppm	ASTM D5185(m)	>3	<b>&lt;1</b>	<1	---
Aluminum	ppm	ASTM D5185(m)	>20	<b>17</b>	26	---
Lead	ppm	ASTM D5185(m)	>40	<b>10</b>	3	---
Copper	ppm	ASTM D5185(m)	>330	<b>10</b>	3	---
Tin	ppm	ASTM D5185(m)	>15	<b>4</b>	2	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	---
White Metal	scalar	Visual*	NONE	<b>VLITE</b>	---	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---

## CONTAMINATION

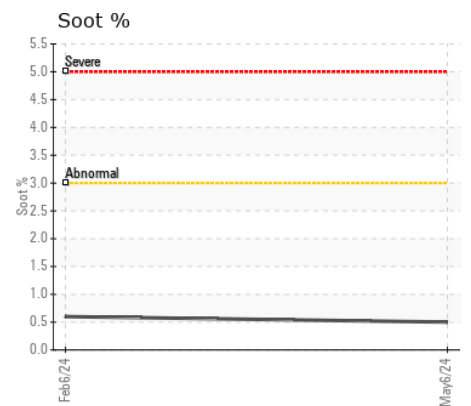
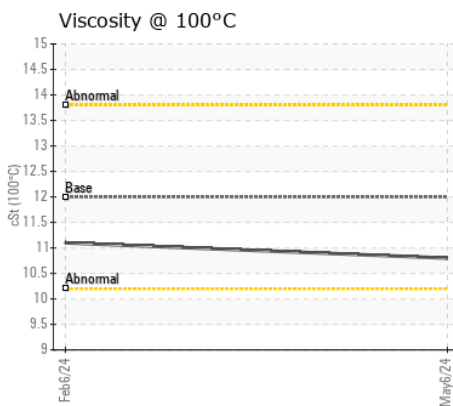
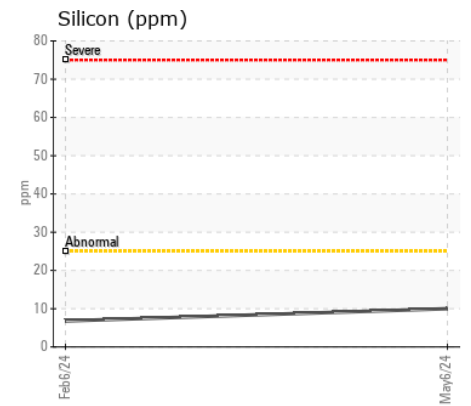
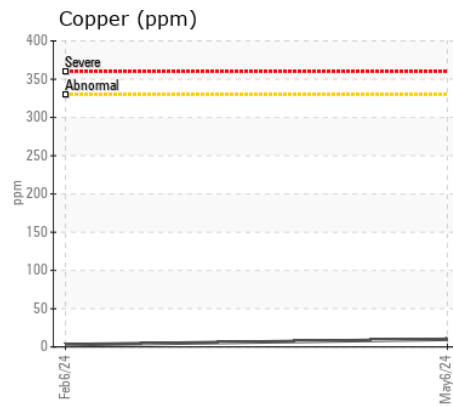
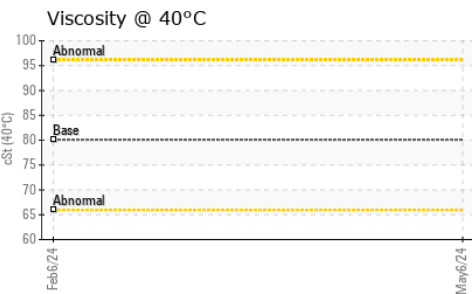
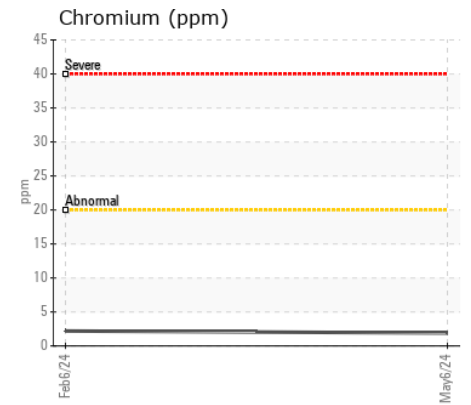
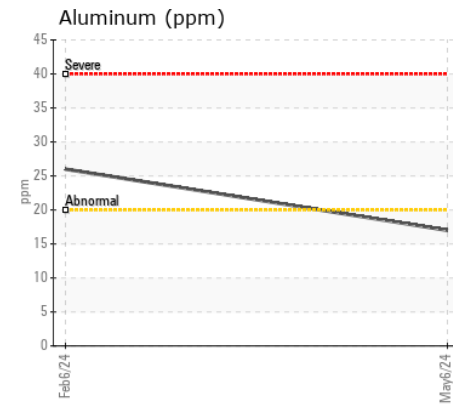
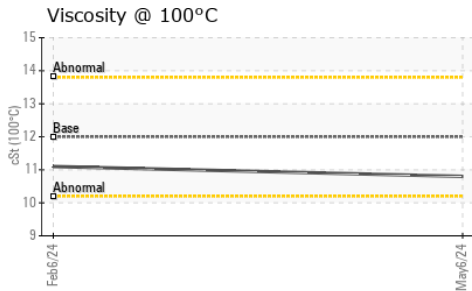
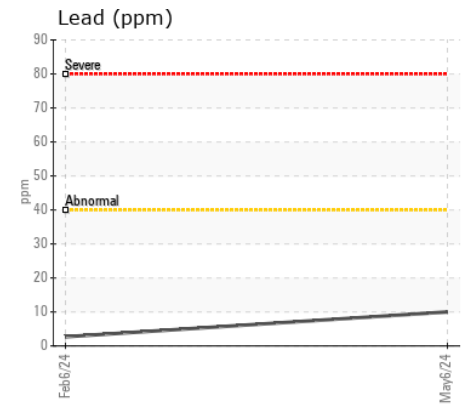
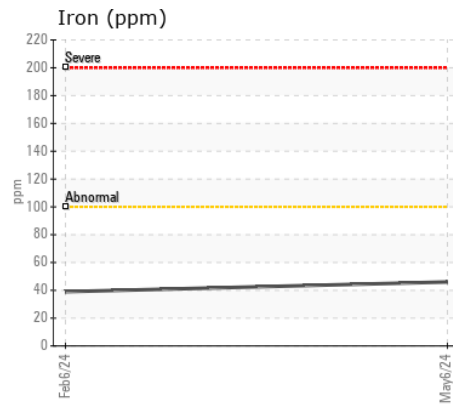
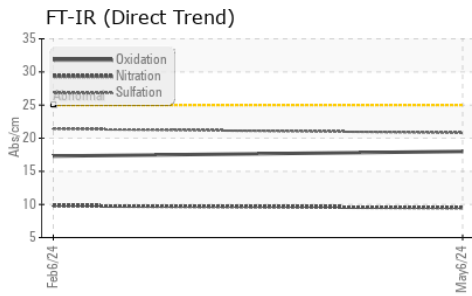
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>10</b>	7	---
Potassium	ppm	ASTM D5185(m)	>20	<b>33</b>	65	---
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	---
Water		WC Method	>0.2	<b>NEG</b>	NEG	---
Glycol		WC Method		<b>NEG</b>	NEG	---
Soot %	%	ASTM D7844*	>3	<b>0.5</b>	0.6	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>9.5</b>	9.8	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>20.8</b>	21.4	---
Silt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Debris	scalar	Visual*	NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Appearance	scalar	Visual*	NORML	<b>NORML</b>	---	---
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	---

## FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		<b>2</b>	2	---
Boron	ppm	ASTM D5185(m)	2	<b>9</b>	4	---
Barium	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0	---
Molybdenum	ppm	ASTM D5185(m)	50	<b>62</b>	62	---
Manganese	ppm	ASTM D5185(m)	0	<b>1</b>	<1	---
Magnesium	ppm	ASTM D5185(m)	950	<b>905</b>	976	---
Calcium	ppm	ASTM D5185(m)	1050	<b>1153</b>	1116	---
Phosphorus	ppm	ASTM D5185(m)	995	<b>942</b>	1029	---
Zinc	ppm	ASTM D5185(m)	1180	<b>1189</b>	1204	---
Sulfur	ppm	ASTM D5185(m)	2600	<b>2226</b>	2605	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>18.0</b>	17.3	---
Visc @ 40°C	cSt	ASTM D7279(m)	80.1	<b>71.2</b>	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	<b>10.8</b>	11.1	---
Viscosity Index (VI)	Scale	ASTM D2270*	144	<b>140</b>	---	---



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0930264  
**Lab Number** : 02645184  
**Unique Number** : 5802723  
**Test Package** : MOB 1 ( Additional Tests: KV40, VI, Visual )

**Received** : 03 Jul 2024  
**Tested** : 04 Jul 2024  
**Diagnosed** : 04 Jul 2024 - Wes Davis

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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