



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Machine Id

**431**

Component

**Diesel Engine**

Fluid

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

## RECOMMENDATION

Check for low coolant level. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0879656</b>	WC0831686	---
Sample Date		Client Info		<b>11 Dec 2023</b>	14 Sep 2023	---
Machine Age	kms	Client Info		<b>842435</b>	842435	---
Oil Age	kms	Client Info		<b>17720</b>	17720	---
Filter Age	kms	Client Info		<b>17720</b>	17720	---
Oil Changed		Client Info		<b>Changed</b>	N/A	---
Filter Changed		Client Info		<b>Changed</b>	N/A	---
Sample Status				<b>ATTENTION</b>	ABNORMAL	---

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>200	<b>16</b>	36	---
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	3	---
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	0	---
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	---
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	---
Aluminum	ppm	ASTM D5185(m)	>30	<b>4</b>	10	---
Lead	ppm	ASTM D5185(m)	>30	<b>0</b>	<1	---
Copper	ppm	ASTM D5185(m)	>30	<b>1</b>	2	---
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	0	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	---

## CONTAMINATION

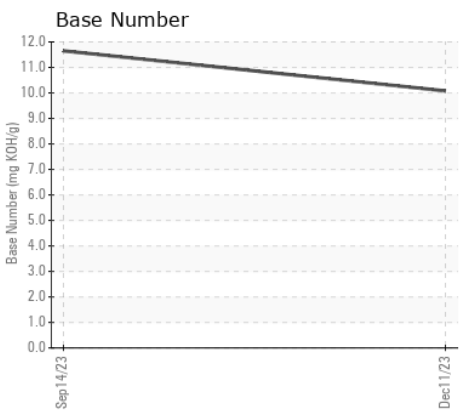
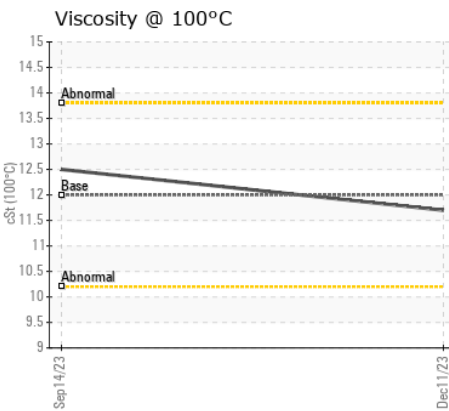
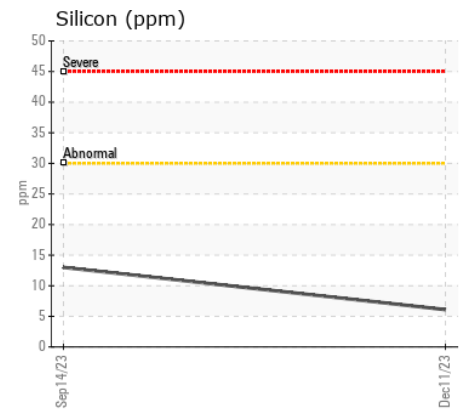
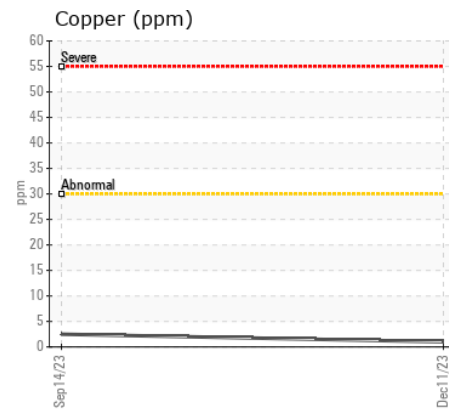
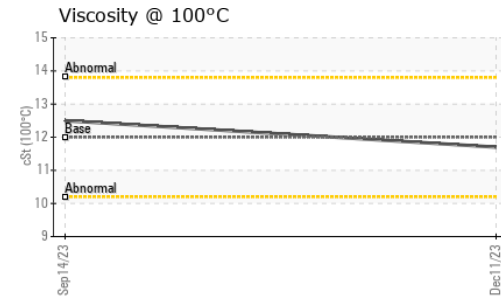
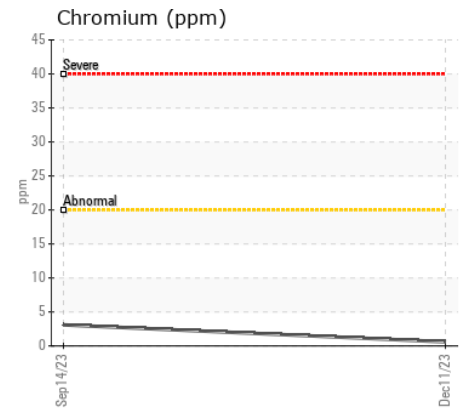
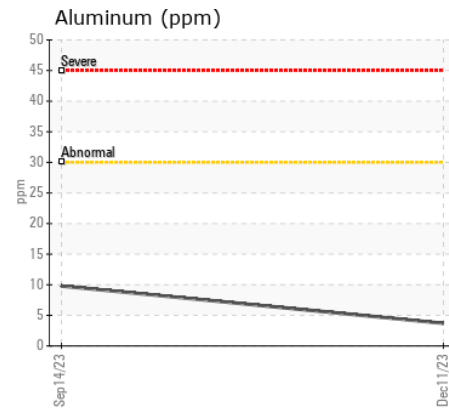
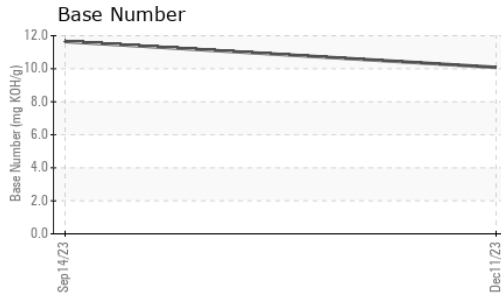
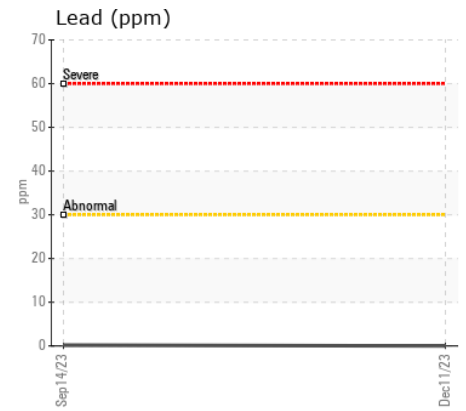
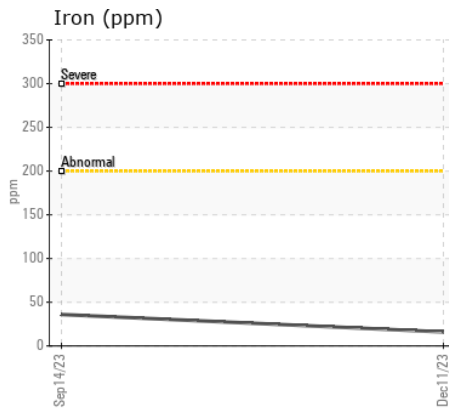
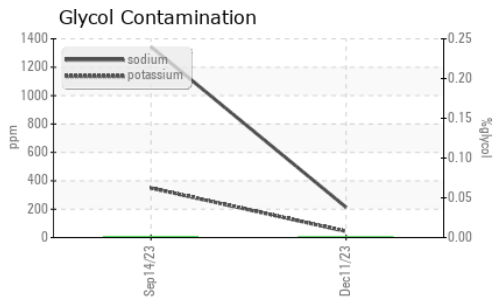
Water treatment chemicals present, indicating slow coolant leak. Test for glycol is negative. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>30	<b>6</b>	13	---
Potassium	ppm	ASTM D5185(m)	>20	<b>44</b>	▲ 349	---
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	<1.0	---
Water		WC Method	>0.2	<b>NEG</b>	NEG	---
Glycol	%	ASTM D7922*		<b>0.0</b>	0.0	---
Soot %	%	ASTM D7844*	>3	<b>0.7</b>	1.8	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>5.8</b>	13.3	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>18.8</b>	24.5	---
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	---

## FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service (see recommendation).

Sodium	ppm	ASTM D5185(m)		▲ <b>213</b>	▲ 1344	---
Boron	ppm	ASTM D5185(m)	2	<b>8</b>	13	---
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	<1	---
Molybdenum	ppm	ASTM D5185(m)	50	<b>69</b>	145	---
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	<1	---
Magnesium	ppm	ASTM D5185(m)	950	<b>923</b>	924	---
Calcium	ppm	ASTM D5185(m)	1050	<b>1029</b>	1059	---
Phosphorus	ppm	ASTM D5185(m)	995	<b>991</b>	992	---
Zinc	ppm	ASTM D5185(m)	1180	<b>1125</b>	1183	---
Sulfur	ppm	ASTM D5185(m)	2600	<b>2751</b>	2617	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>12.4</b>	15.4	---
Base Number (BN)	mg KOH/g	ASTM D2896*		<b>10.08</b>	11.65	---
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	<b>11.7</b>	12.5	---



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0879656 **Received** : 22 Jan 2024  
**Lab Number** : 02610113 **Diagnosed** : 23 Jan 2024  
**Unique Number** : 5711199 **Diagnostician** : Kevin Marson  
**Test Package** : MOB 2 ( Additional Tests: Glycol )

**Moncton - Transport Laberge**  
 180 Edinburg Drive, Suite 1A  
 Moncton, NB  
 CA E1E 2K7  
 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: