



# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**BD SHOP**  
 Machine Id  
**200287**

Component  
**Diesel Engine**  
 Fluid

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

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### 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 no indication of any contamination in the oil.

### Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>WC0814939</b>	---	---
Sample Date	Client Info			<b>11 Aug 2023</b>	---	---
Machine Age	kms	Client Info		<b>122534</b>	---	---
Oil Age	kms	Client Info		<b>1</b>	---	---
Oil Changed	Client Info			<b>Changed</b>	---	---
Sample Status				<b>NORMAL</b>	---	---

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method		>3.0	<b>&lt;1.0</b>	---	---
Glycol	WC Method			<b>NEG</b>	---	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>200	<b>6</b>	---	---
Chromium	ppm	ASTM D5185(m)	>6	<b>&lt;1</b>	---	---
Nickel	ppm	ASTM D5185(m)	>3	<b>0</b>	---	---
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	---	---
Silver	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	---	---
Aluminum	ppm	ASTM D5185(m)	>50	<b>2</b>	---	---
Lead	ppm	ASTM D5185(m)	>10	<b>0</b>	---	---
Copper	ppm	ASTM D5185(m)	>50	<b>12</b>	---	---
Tin	ppm	ASTM D5185(m)	>6	<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>	---	---

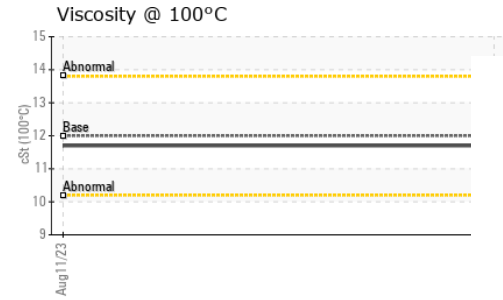
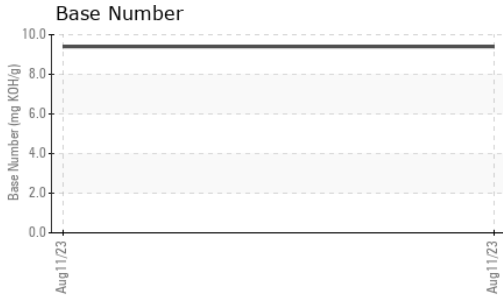
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	2	<b>6</b>	---	---
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185(m)	50	<b>57</b>	---	---
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185(m)	950	<b>949</b>	---	---
Calcium	ppm	ASTM D5185(m)	1050	<b>1035</b>	---	---
Phosphorus	ppm	ASTM D5185(m)	995	<b>1035</b>	---	---
Zinc	ppm	ASTM D5185(m)	1180	<b>1145</b>	---	---
Sulfur	ppm	ASTM D5185(m)	2600	<b>2496</b>	---	---
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>50	<b>4</b>	---	---
Sodium	ppm	ASTM D5185(m)		<b>2</b>	---	---
Potassium	ppm	ASTM D5185(m)	>20	<b>6</b>	---	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	<b>0</b>	---	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>5.0</b>	---	---
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>18.9</b>	---	---



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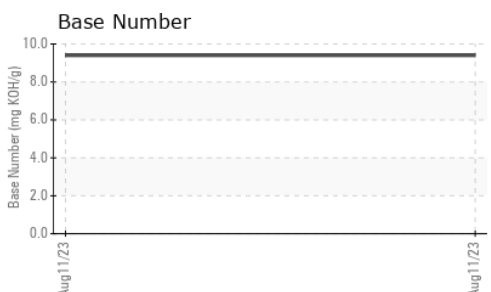
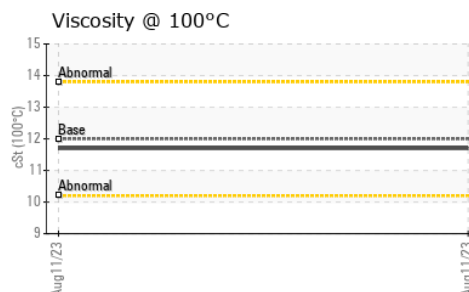
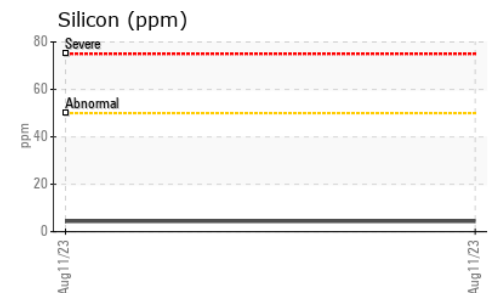
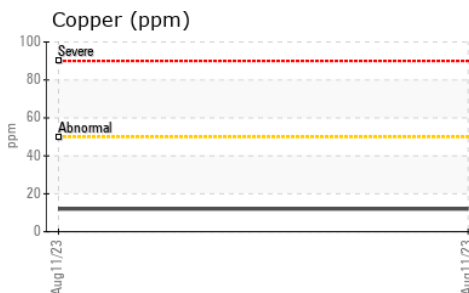
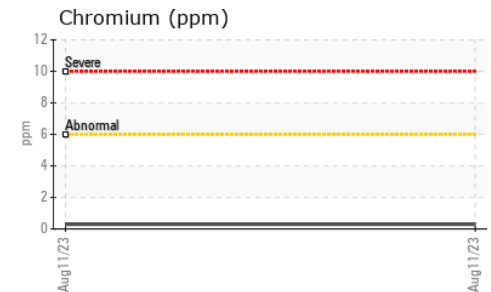
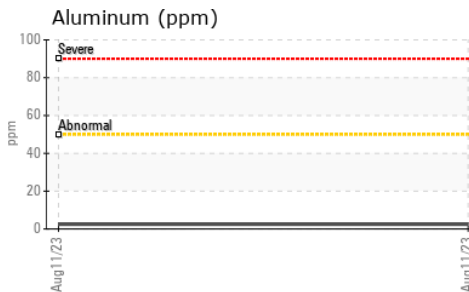
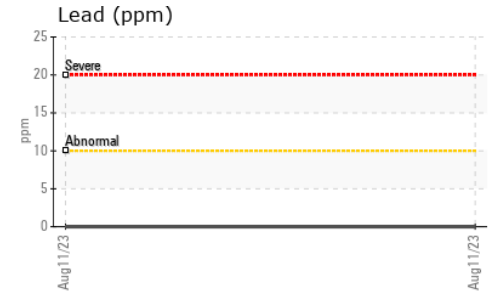
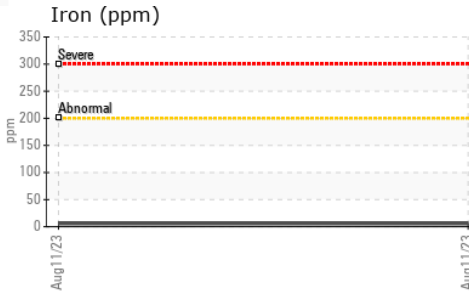


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>13.5</b>	---	---
Base Number (BN)	mg KOH/g	ASTM D2896*		<b>9.40</b>	---	---

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>11.7</b>	---	---

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0814939      **Received** : 14 Aug 2023  
**Lab Number** : **02575549**      **Diagnosed** : 14 Aug 2023  
**Unique Number** : 5620600      **Diagnostician** : Wes Davis  
**Test Package** : MOB 2

**WFR Technical Services**  
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 Burlington, ON  
 CA L7L 3Y1  
 Contact: William Ridley  
 wfr.technical.services@gmail.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.