



# OIL ANALYSIS REPORT

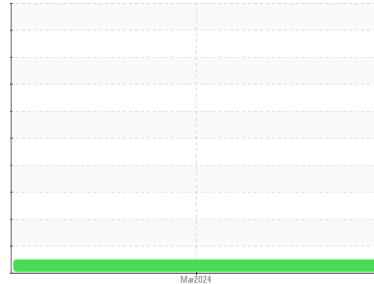
Sample Rating Trend

**NORMAL**



Area  
**[134152]**  
Machine Id  
**NO UNIT CU0021776**

Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (--- LTR)**



## DIAGNOSIS

### Recommendation

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor.

### Wear

Metal levels are typical for a new component breaking in.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>CU0021776</b>	---	---
Sample Date	Client Info		<b>07 Mar 2024</b>	---	---
Machine Age	hrs	Client Info	<b>696</b>	---	---
Oil Age	hrs	Client Info	<b>0</b>	---	---
Oil Changed	Client Info		<b>N/A</b>	---	---
Sample Status			<b>NORMAL</b>	---	---

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<b>&lt;1.0</b>	---	---
Water	WC Method	>0.2	<b>NEG</b>	---	---
Glycol	WC Method		<b>NEG</b>	---	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >100	<b>2</b>	---	---
Chromium	ppm	ASTM D5185(m) >20	<b>0</b>	---	---
Nickel	ppm	ASTM D5185(m) >2	<b>&lt;1</b>	---	---
Titanium	ppm	ASTM D5185(m) >2	<b>0</b>	---	---
Silver	ppm	ASTM D5185(m) >2	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185(m) >25	<b>2</b>	---	---
Lead	ppm	ASTM D5185(m) >40	<b>&lt;1</b>	---	---
Copper	ppm	ASTM D5185(m) >330	<b>&lt;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>40</b>	---	---
Barium	ppm	ASTM D5185(m) 0	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185(m) 60	<b>46</b>	---	---
Manganese	ppm	ASTM D5185(m) 0	<b>0</b>	---	---
Magnesium	ppm	ASTM D5185(m) 1010	<b>812</b>	---	---
Calcium	ppm	ASTM D5185(m) 1070	<b>1210</b>	---	---
Phosphorus	ppm	ASTM D5185(m) 1150	<b>736</b>	---	---
Zinc	ppm	ASTM D5185(m) 1270	<b>838</b>	---	---
Sulfur	ppm	ASTM D5185(m) 2060	<b>2102</b>	---	---
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	---	---

## CONTAMINANTS

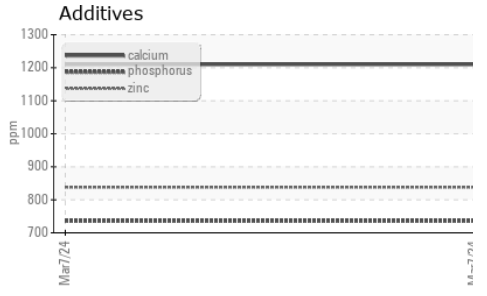
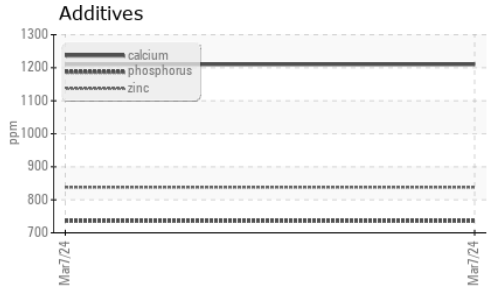
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	<b>6</b>	---	---
Sodium	ppm	ASTM D5185(m)	<b>3</b>	---	---
Potassium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	---	---

## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >3	<b>0</b>	---	---
Nitration	Abs/cm	ASTM D7624* >20	<b>7.4</b>	---	---
Sulfation	Abs./1mm	ASTM D7415* >30	<b>20.4</b>	---	---



# OIL ANALYSIS REPORT



FLUID DEGRADATION	method	limit/base	current	history1	history2	
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>18.2</b>	---	---

Oxidation	Abs./1mm	ASTM D7414*	>25	<b>18.2</b>	---	---
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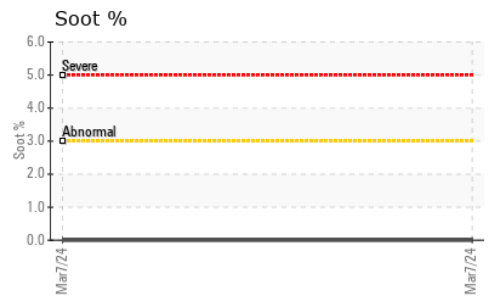
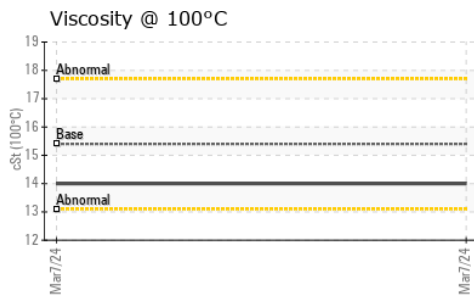
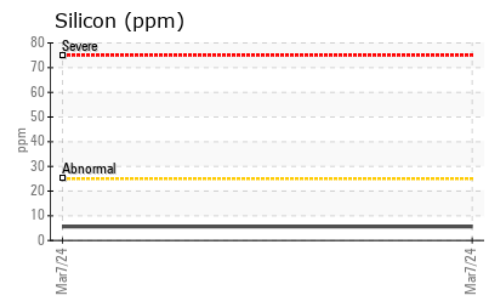
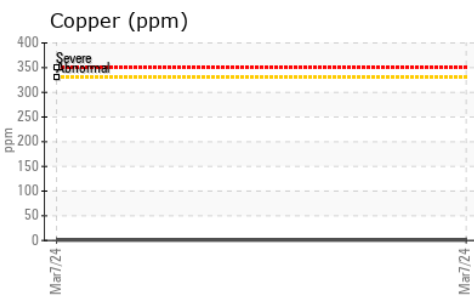
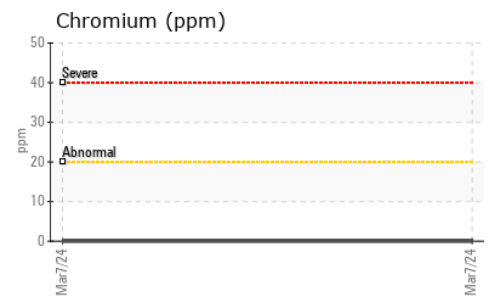
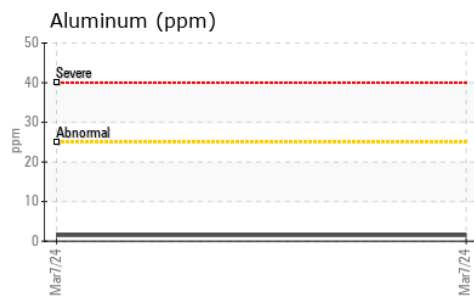
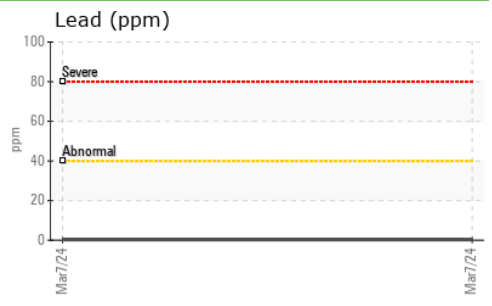
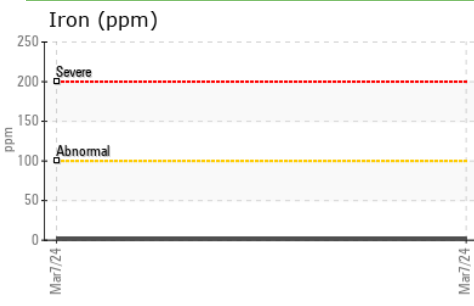
VISUAL	method	limit/base	current	history1	history2	
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	---	---
Free Water	scalar	Visual*		<b>NEG</b>	---	---

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)	15.4	<b>14.0</b>	---	---

Visc @ 100°C	cSt	ASTM D7279(m)	15.4	<b>14.0</b>	---	---
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## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : CU0021776  
**Lab Number** : 02621322  
**Unique Number** : 5746441  
**Test Package** : MOB 1  
**Received** : 12 Mar 2024  
**Tested** : 12 Mar 2024  
**Diagnosed** : 13 Mar 2024 - Kevin Marson

**CUMMINS CANADA ULC - GENERATOR DIVISION**  
 7175 PACIFIC CIRCLE  
 MISSISSAUGA, ON  
 CA L5T 2A5  
 Contact: Zaneef Abboobakar  
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 T:  
 F: (905)795-0035

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.