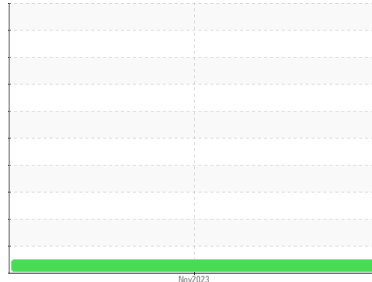


# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**250266**

Component  
**Rear Diesel Engine**

Fluid  
**CASTROL HYPURON 15W40 (--- LTR)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

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>PC0083782</b>	---	---
Sample Date	Client Info			<b>29 Nov 2023</b>	---	---
Machine Age	kms	Client Info		<b>264642</b>	---	---
Oil Age	kms	Client Info		<b>0</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>	---	---
Water	WC Method		>0.2	<b>NEG</b>	---	---

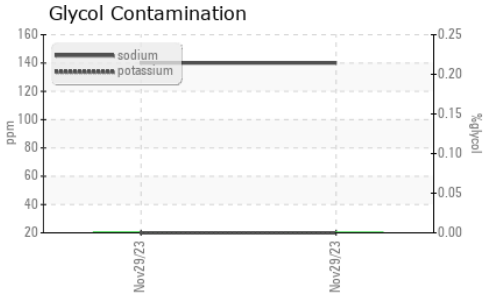
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>90	<b>40</b>	---	---
Chromium	ppm	ASTM D5185(m)	>20	<b>4</b>	---	---
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	---	---
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	---	---
Silver	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	---	---
Aluminum	ppm	ASTM D5185(m)	>20	<b>3</b>	---	---
Lead	ppm	ASTM D5185(m)	>40	<b>1</b>	---	---
Copper	ppm	ASTM D5185(m)	>330	<b>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)		<b>5</b>	---	---
Barium	ppm	ASTM D5185(m)		<b>&lt;1</b>	---	---
Molybdenum	ppm	ASTM D5185(m)		<b>71</b>	---	---
Manganese	ppm	ASTM D5185(m)		<b>0</b>	---	---
Magnesium	ppm	ASTM D5185(m)		<b>1035</b>	---	---
Calcium	ppm	ASTM D5185(m)		<b>1143</b>	---	---
Phosphorus	ppm	ASTM D5185(m)		<b>1025</b>	---	---
Zinc	ppm	ASTM D5185(m)		<b>1271</b>	---	---
Sulfur	ppm	ASTM D5185(m)		<b>2513</b>	---	---
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	<b>19</b>	---	---
Sodium	ppm	ASTM D5185(m)		<b>140</b>	---	---
Potassium	ppm	ASTM D5185(m)	>20	<b>20</b>	---	---
Glycol	%	ASTM D7922*		<b>0.0</b>	---	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>6	<b>0.3</b>	---	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>11.3</b>	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>25.3</b>	---	---

# OIL ANALYSIS REPORT

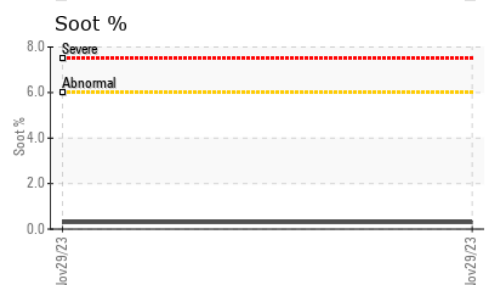
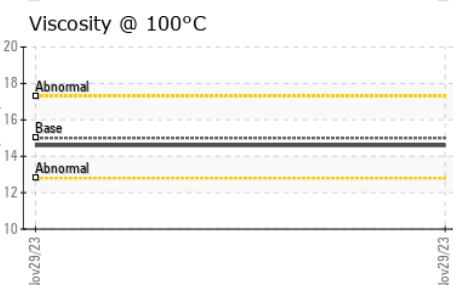
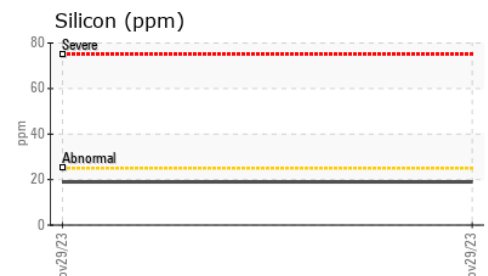
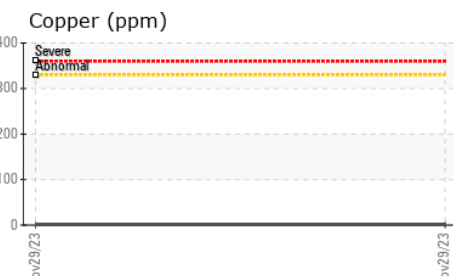
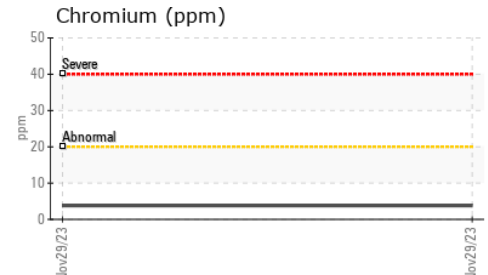
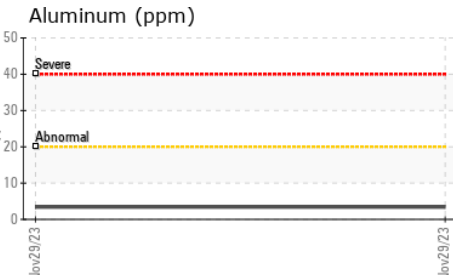
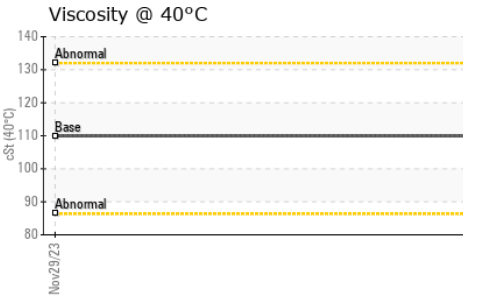
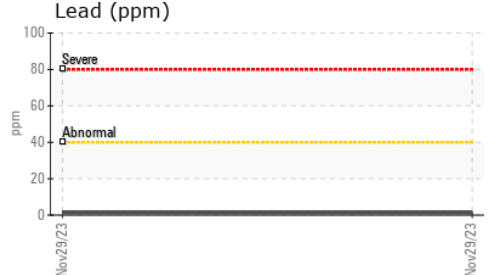
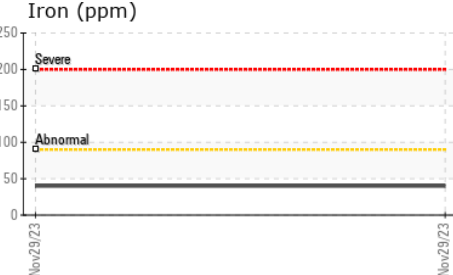
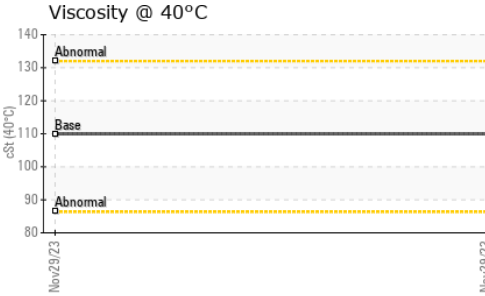


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>24.2</b>	---	---

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)	110	<b>110</b>	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.0	<b>14.6</b>	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	140	<b>136</b>	---	---

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0083782 **Received** : 15 Dec 2023  
**Lab Number** : **02603429** **Diagnosed** : 15 Dec 2023  
**Unique Number** : 5696514 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: Glycol, KV40, VI )

**TORONTO FIRE SERVICES**  
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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.