



Machine Id  
**NO UNIT PC0085018**  
Component  
**Diesel Engine**  
Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

**DIAGNOSIS**

**Recommendation**

Resample at the next service interval to monitor.

**Wear**

Metal levels are typical for a components first oil change.

**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>PC0085018</b>	---	---
Sample Date	Client Info			<b>08 Mar 2024</b>	---	---
Machine Age	mths	Client Info		<b>6</b>	---	---
Oil Age	mths	Client Info		<b>6</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>	---	---

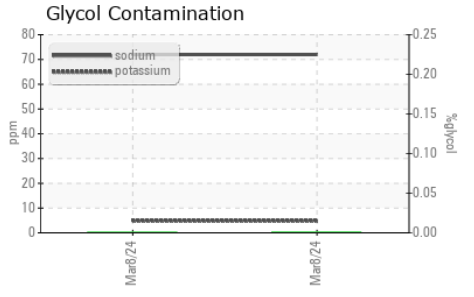
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>75	<b>39</b>	---	---
Chromium	ppm	ASTM D5185(m)	>5	<b>1</b>	---	---
Nickel	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	---	---
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	---	---
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185(m)	>15	<b>4</b>	---	---
Lead	ppm	ASTM D5185(m)	>25	<b>&lt;1</b>	---	---
Copper	ppm	ASTM D5185(m)	>100	<b>5</b>	---	---
Tin	ppm	ASTM D5185(m)	>4	<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)	250	<b>3</b>	---	---
Barium	ppm	ASTM D5185(m)	10	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185(m)	100	<b>64</b>	---	---
Manganese	ppm	ASTM D5185(m)		<b>0</b>	---	---
Magnesium	ppm	ASTM D5185(m)	450	<b>994</b>	---	---
Calcium	ppm	ASTM D5185(m)	3000	<b>1077</b>	---	---
Phosphorus	ppm	ASTM D5185(m)	1150	<b>993</b>	---	---
Zinc	ppm	ASTM D5185(m)	1350	<b>1210</b>	---	---
Sulfur	ppm	ASTM D5185(m)	4250	<b>2402</b>	---	---
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	<b>9</b>	---	---
Sodium	ppm	ASTM D5185(m)	>158	<b>72</b>	---	---
Potassium	ppm	ASTM D5185(m)	>20	<b>5</b>	---	---
Glycol	%	ASTM D7922*		<b>0.0</b>	---	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>6	<b>1</b>	---	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>13.9</b>	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>29.0</b>	---	---

# OIL ANALYSIS REPORT

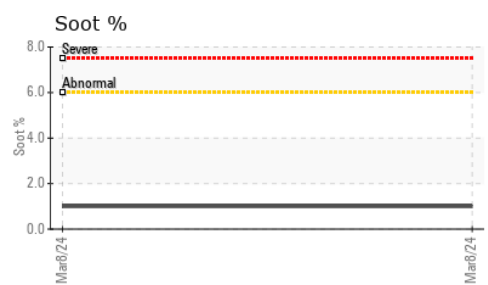
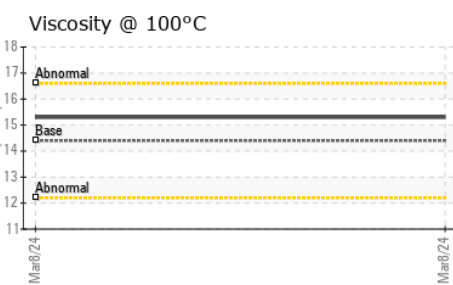
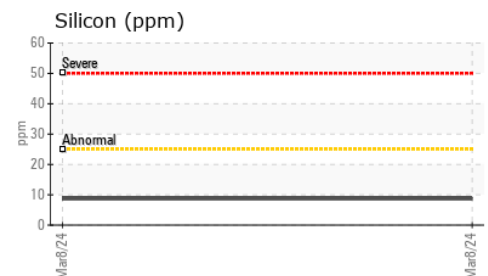
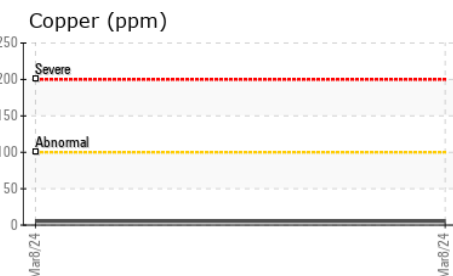
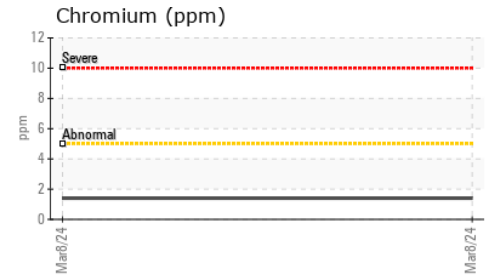
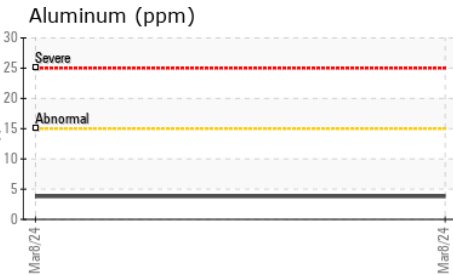
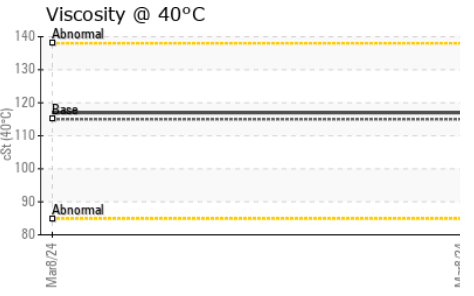
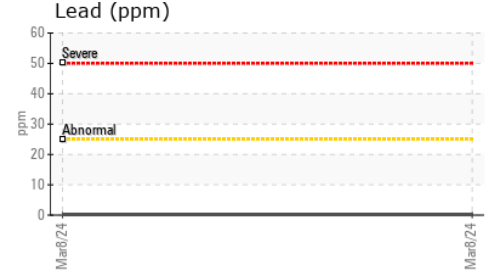
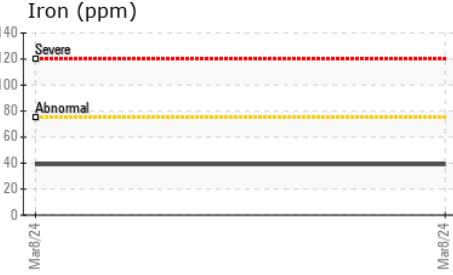
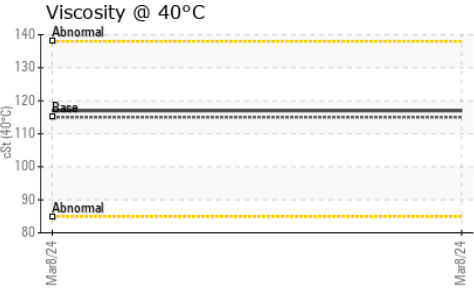


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>29.4</b>	---	---

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)	115	<b>117</b>	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	<b>15.3</b>	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	126	<b>136</b>	---	---

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0085018 **Received** : 26 Mar 2024  
**Lab Number** : **02624576** **Tested** : 26 Mar 2024  
**Unique Number** : 5749695 **Diagnosed** : 26 Mar 2024 - Kevin Marson  
**Test Package** : MOB 1 ( Additional Tests: Glycol, KV40, VI )

**TORONTO FIRE SERVICES**  
 40 TORYORK DRIVE  
 TORONTO, ON  
 CA M9L 1X6  
 Contact: Antonio Rodrigues  
 antonio.rodrigues@toronto.ca  
 T:  
 F: (416)338-9207

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.