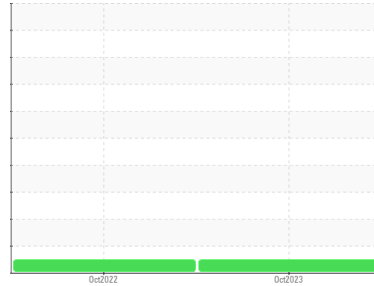


# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**R-19 300924**

Component  
**Diesel Engine**

Fluid  
**SAFETY-KLEEN ECOPOWER 15W40 CJ-4 (--- GAL)**

## DIAGNOSIS

### Recommendation

Confirm the source of the lubricant being utilized for top-up/fill. 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

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>PC0078205</b>	PC0054317	---
Sample Date	Client Info			<b>06 Oct 2023</b>	19 Oct 2022	---
Machine Age	kms	Client Info		<b>155085</b>	154054	---
Oil Age	kms	Client Info		<b>1300</b>	2000	---
Oil Changed	Client Info			<b>Not Chngd</b>	Not Chngd	---
Sample Status				<b>NORMAL</b>	NORMAL	---

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

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>200	<b>8</b>	4	---
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	---
Nickel	ppm	ASTM D5185(m)	>2	<b>0</b>	0	---
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	---
Silver	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	0	---
Aluminum	ppm	ASTM D5185(m)	>30	<b>6</b>	3	---
Lead	ppm	ASTM D5185(m)	>30	<b>&lt;1</b>	<1	---
Copper	ppm	ASTM D5185(m)	>30	<b>1</b>	<1	---
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	<1	---
Antimony	ppm	ASTM D5185(m)		<b>0</b>	<1	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	---
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	---
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0	---

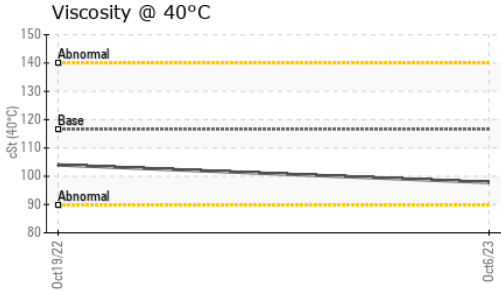
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	0	<b>7</b>	1	---
Barium	ppm	ASTM D5185(m)	0	<b>1</b>	0	---
Molybdenum	ppm	ASTM D5185(m)	50	<b>65</b>	57	---
Manganese	ppm	ASTM D5185(m)		<b>0</b>	<1	---
Magnesium	ppm	ASTM D5185(m)	825	<b>1066</b>	936	---
Calcium	ppm	ASTM D5185(m)	925	<b>1225</b>	1032	---
Phosphorus	ppm	ASTM D5185(m)	850	<b>1137</b>	1083	---
Zinc	ppm	ASTM D5185(m)	1000	<b>1350</b>	1156	---
Sulfur	ppm	ASTM D5185(m)	2250	<b>2984</b>	2638	---
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>30	<b>3</b>	2	---
Sodium	ppm	ASTM D5185(m)		<b>2</b>	1	---
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	<b>0.2</b>	0	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>6.5</b>	5.5	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>18.1</b>	18.8	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>14.0</b>	14.0	---

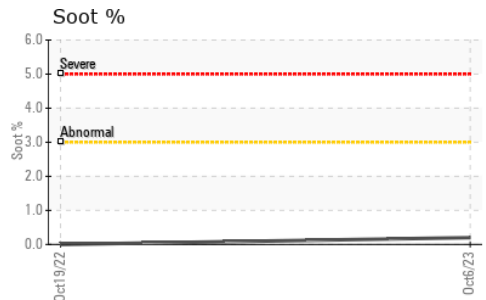
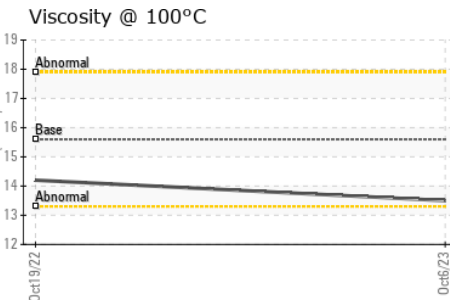
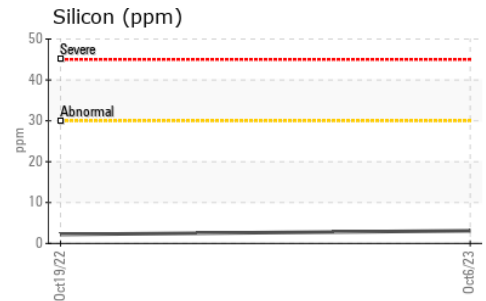
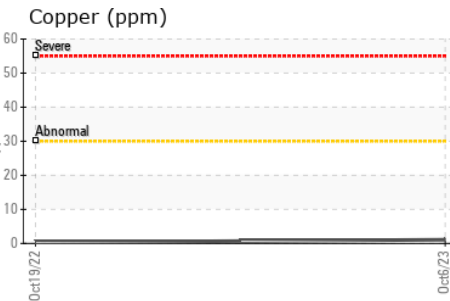
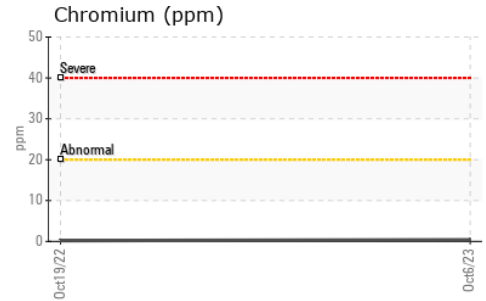
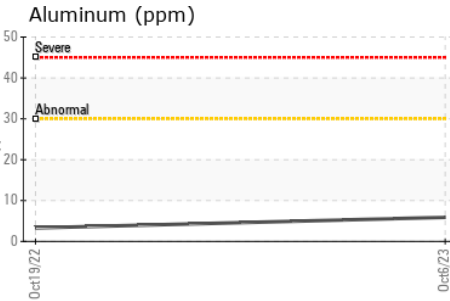
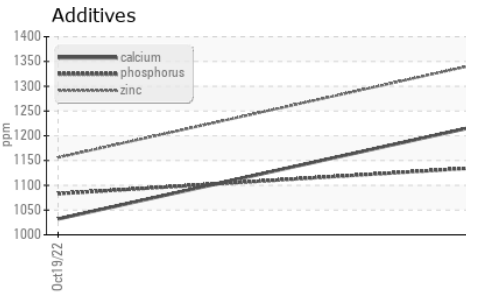
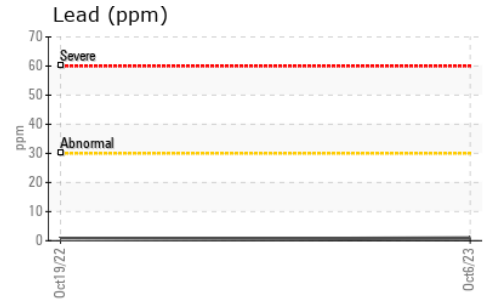
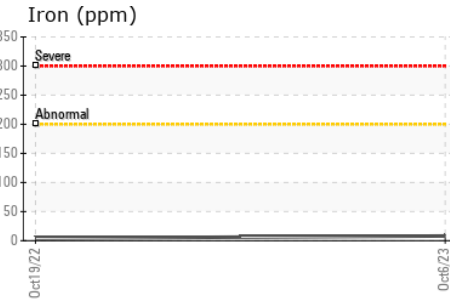
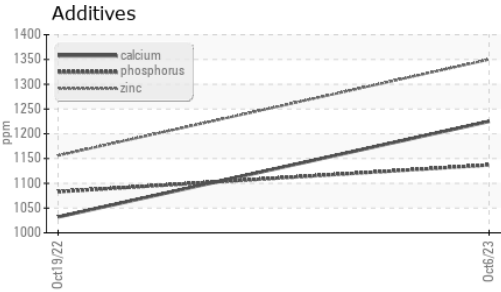
# OIL ANALYSIS REPORT



VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	---
Free Water	scalar	Visual*		<b>NEG</b>	NEG	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	116.6	<b>97.8</b>	104	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	<b>13.5</b>	14.2	---
Viscosity Index (VI)	Scale	ASTM D2270*	141	<b>138</b>	139	---

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0078205  
**Lab Number** : 02592900  
**Unique Number** : 5669979  
**Test Package** : MOB 1 ( Additional Tests: KV40, VI )

**HAMILTON FIRE DEPT**  
 MECHANICAL DIV., 177 BAY STREET NORTH  
 HAMILTON, ON  
 CA L8R 2P8  
 Contact: Jenny-Lynn Pellegrino  
 jenny-lynn.pellegrino@hamilton.ca  
 T: (905)546-2424  
 F: (905)961-9116

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.