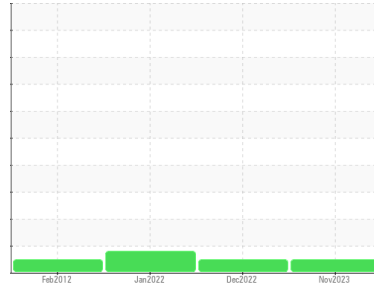


# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**KME P16**

Component  
**Diesel Engine**

Fluid  
**SAFETY-KLEEN PERFORMANCE PLUS 15W40 (40 LTR)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

Metal levels are typical for a new component breaking in.

### 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 condition of the oil is acceptable for the time in service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>PC0078493</b>	PC0050427	PC0050485
Sample Date	Client Info		<b>20 Nov 2023</b>	29 Dec 2022	19 Jan 2022
Machine Age	kms	Client Info	<b>9195</b>	5712	3082
Oil Age	kms	Client Info	<b>7000</b>	3000	0
Oil Changed	Client Info		<b>Changed</b>	Not Changd	Changed
Sample Status			<b>NORMAL</b>	NORMAL	ABNORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<b>&lt;1.0</b>	<1.0	1.1
Water	WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol	WC Method		<b>NEG</b>	NEG	0.0

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >100	<b>34</b>	15	22
Chromium	ppm	ASTM D5185(m) >20	<b>1</b>	<1	<1
Nickel	ppm	ASTM D5185(m) >4	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	<b>0</b>	<1	0
Silver	ppm	ASTM D5185(m) >3	<b>&lt;1</b>	1	2
Aluminum	ppm	ASTM D5185(m) >20	<b>4</b>	2	4
Lead	ppm	ASTM D5185(m) >40	<b>3</b>	<1	<1
Copper	ppm	ASTM D5185(m) >330	<b>109</b>	5	11
Tin	ppm	ASTM D5185(m) >15	<b>1</b>	<1	<1
Antimony	ppm	ASTM D5185(m)	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 1.4	<b>10</b>	14	129
Barium	ppm	ASTM D5185(m) 0.1	<b>&lt;1</b>	0	2
Molybdenum	ppm	ASTM D5185(m) 0.1	<b>55</b>	52	9
Manganese	ppm	ASTM D5185(m)	<b>1</b>	1	3
Magnesium	ppm	ASTM D5185(m) 2.7	<b>847</b>	852	143
Calcium	ppm	ASTM D5185(m) 2328	<b>1190</b>	1212	1990
Phosphorus	ppm	ASTM D5185(m) 924	<b>889</b>	1101	996
Zinc	ppm	ASTM D5185(m) 1004	<b>1185</b>	1197	1149
Sulfur	ppm	ASTM D5185(m) 3828	<b>2398</b>	2693	2942
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

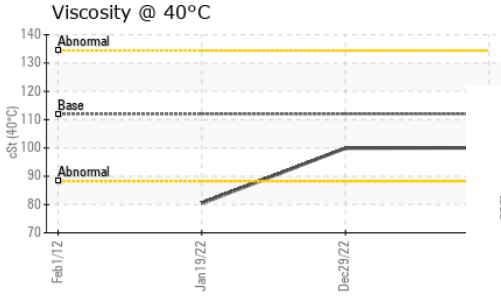
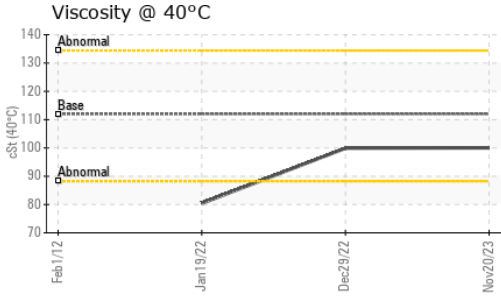
## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	<b>10</b>	7	15
Sodium	ppm	ASTM D5185(m)	<b>3</b>	2	3
Potassium	ppm	ASTM D5185(m) >20	<b>8</b>	5	23

## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >3	<b>0.7</b>	0.2	0.1
Nitration	Abs/cm	ASTM D7624* >20	<b>11.6</b>	8.4	7.8
Sulfation	Abs./1mm	ASTM D7415* >30	<b>24.3</b>	20.7	21.6

# OIL ANALYSIS REPORT

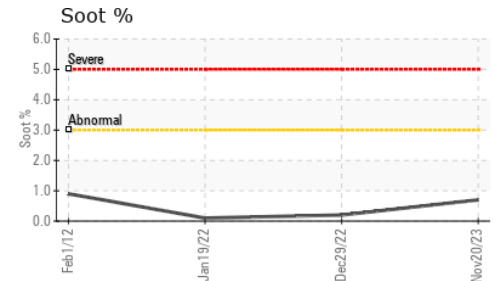
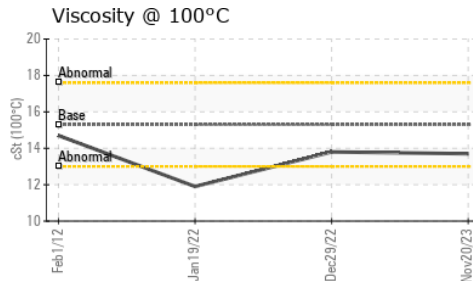
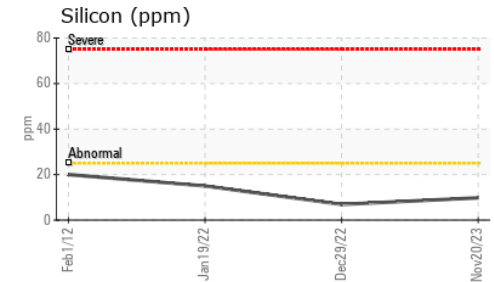
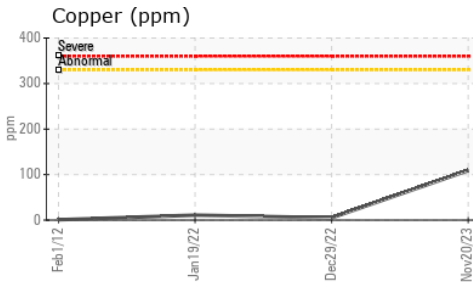
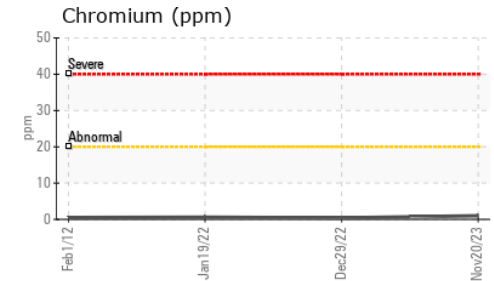
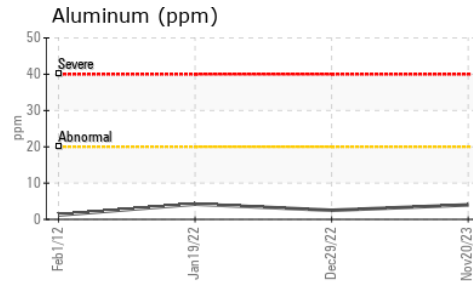
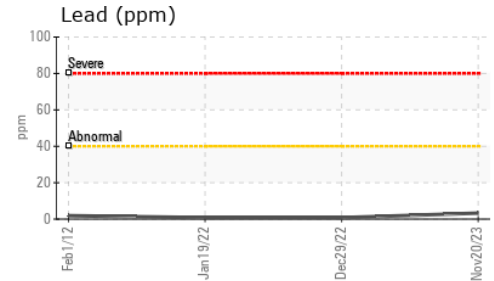
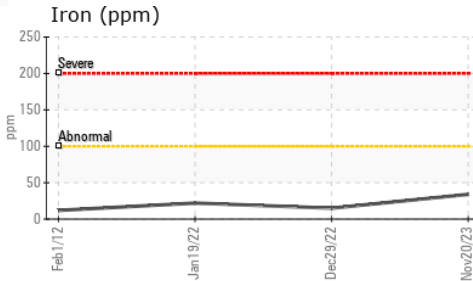


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>20.8</b>	15.7	16.5

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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	112	<b>100</b>	99.9	▲ 80.4
Visc @ 100°C	cSt	ASTM D7279(m)	15.3	<b>13.7</b>	13.8	▲ 11.9
Viscosity Index (VI)	Scale	ASTM D2270*	143	<b>137</b>	139	142

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0078493 **Received** : 06 Dec 2023  
**Lab Number** : **02601169** **Diagnosed** : 06 Dec 2023  
**Unique Number** : 5694254 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: KV40, VI )

**HAMILTON FIRE DEPT**  
 MECHANICAL DIV., 177 BAY STREET NORTH  
 HAMILTON, ON  
 CA L8R 2P8  
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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.