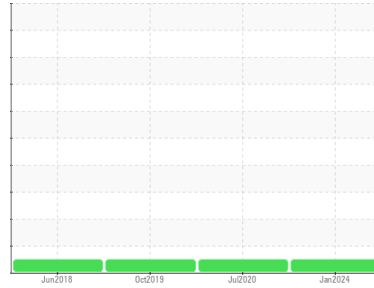




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**[99891]**  
 Machine Id  
**10-250-001 (S/N 30367205)**  
 Component  
**Diesel Engine**  
 Fluid  
**VALVOLINE 15W40 (--- GAL)**

## DIAGNOSIS

### Recommendation

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

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>CU0020701</b>	CU0016206	CU0015681
Sample Date	Client Info		<b>20 Jan 2024</b>	04 Jul 2020	06 Oct 2019
Machine Age	hrs	Client Info	<b>452</b>	357	346
Oil Age	hrs	Client Info	<b>40</b>	0	21
Oil Changed	Client Info		<b>Changed</b>	Changed	N/A
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<b>&lt;1.0</b>	<1.0	<1.0
Water	WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>90	<b>3</b>	2	2
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	8
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>1</b>	<1	1
Lead	ppm	ASTM D5185(m)	>40	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185(m)	>330	<b>21</b>	<1	1
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	0	<1
Antimony	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	<1
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)	39	<b>43</b>	60	67
Barium	ppm	ASTM D5185(m)	1	<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185(m)	49	<b>46</b>	46	43
Manganese	ppm	ASTM D5185(m)	1	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	616	<b>768</b>	619	590
Calcium	ppm	ASTM D5185(m)	1554	<b>1189</b>	1582	1563
Phosphorus	ppm	ASTM D5185(m)	899	<b>712</b>	1057	1061
Zinc	ppm	ASTM D5185(m)	1069	<b>799</b>	1210	1203
Sulfur	ppm	ASTM D5185(m)	2624	<b>2051</b>	2728	2775
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

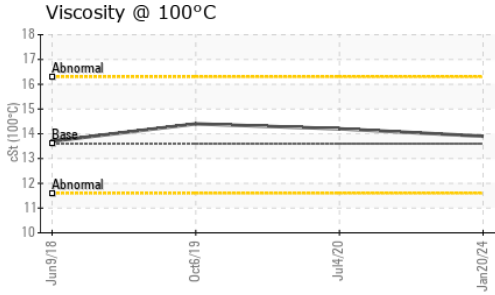
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	<b>4</b>	4	3
Sodium	ppm	ASTM D5185(m)		<b>3</b>	3	2
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>6	<b>0</b>	0	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>6.8</b>	7.2	6.8
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>20.2</b>	24.6	21.6



# OIL ANALYSIS REPORT



FLUID DEGRADATION		method	limit/base	current	history1	history2
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Oxidation	Abs./1mm	ASTM D7414*	>25	<b>17.6</b>	15.9	15.8
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VISUAL		method	limit/base	current	history1	history2
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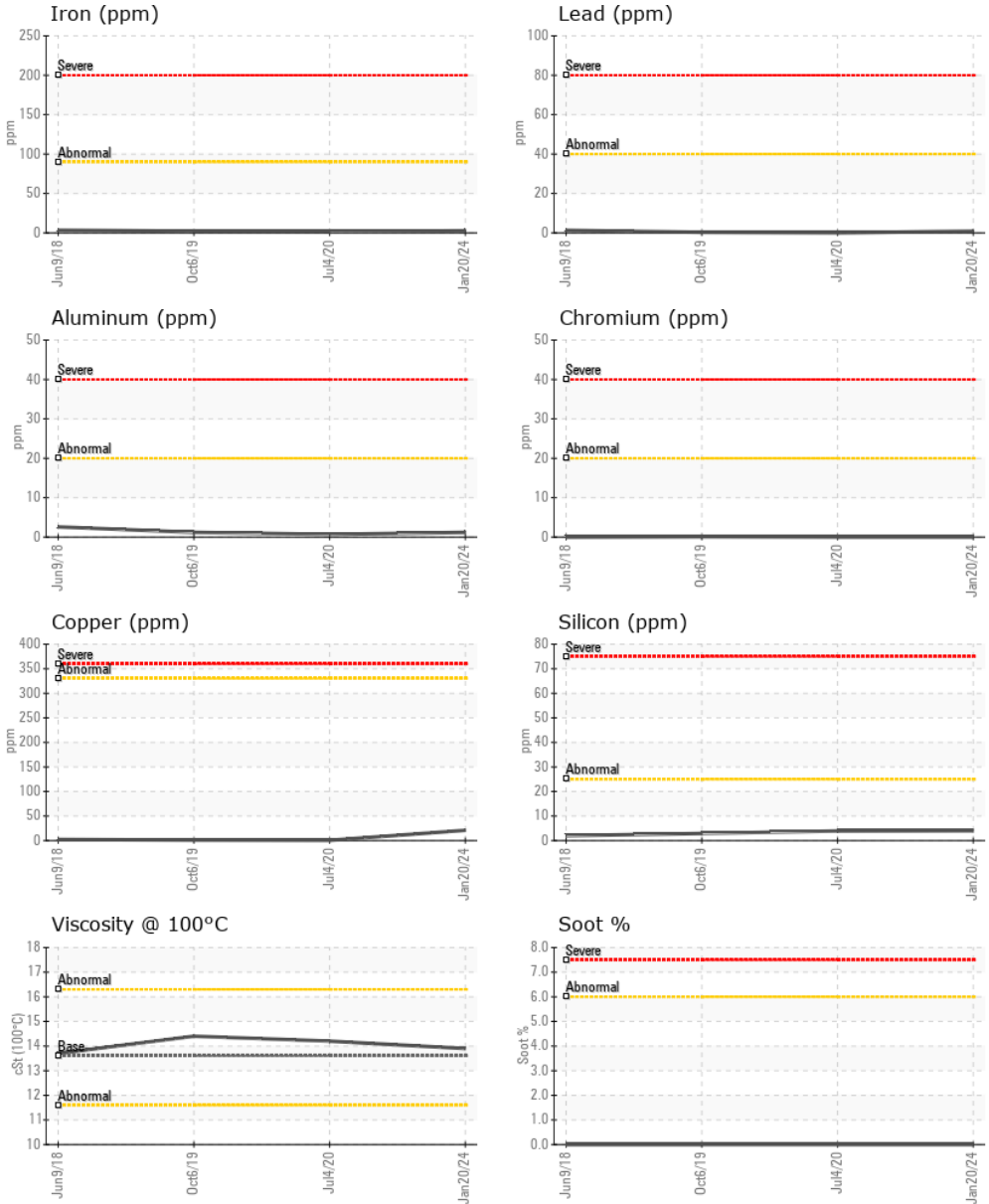
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG
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Free Water	scalar	Visual*		<b>NEG</b>	NEG	NEG
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FLUID PROPERTIES		method	limit/base	current	history1	history2
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Visc @ 100°C	cSt	ASTM D7279(m)	13.6	<b>13.9</b>	14.2	14.4
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## GRAPHS



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : CU0020701  
**Lab Number** : 02610848  
**Unique Number** : 5719943  
**Test Package** : MOB 1

**Received** : 24 Jan 2024  
**Diagnosed** : 24 Jan 2024  
**Diagnostician** : Wes Davis

**CUMMINS EASTERN CANADA LP**  
 3189 SWANSEA CRESCENT  
 OTTAWA, ON  
 CA K1G 3W5  
 Contact: Cindy Harrison  
 cindy.harrison@cummins.com  
 T: (613)736-1146  
 F: x:

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.