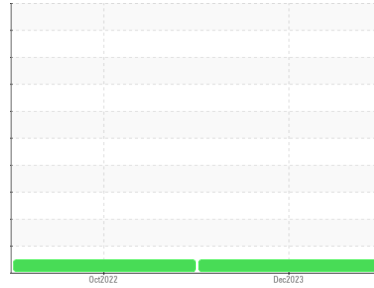




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**NAFC BUILDING**  
 Machine Id  
**85008335**  
 Component  
**Diesel Engine**  
 Fluid  
**VALVOLINE 15W40 (--- GAL)**

## 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>CU0022609</b>	CU0017910	---
Sample Date	Client Info			<b>05 Dec 2023</b>	13 Oct 2022	---
Machine Age	hrs	Client Info		<b>0</b>	37	---
Oil Age	hrs	Client Info		<b>0</b>	0	---
Oil Changed	Client Info			<b>N/A</b>	N/A	---
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	---
Water	WC Method	>0.2		<b>NEG</b>	NEG	---
Glycol	WC Method			<b>NEG</b>	NEG	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>90	<b>2</b>	4	---
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	0	---
Nickel	ppm	ASTM D5185(m)	>2	<b>0</b>	0	---
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	---
Silver	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	0	---
Aluminum	ppm	ASTM D5185(m)	>20	<b>1</b>	1	---
Lead	ppm	ASTM D5185(m)	>40	<b>1</b>	4	---
Copper	ppm	ASTM D5185(m)	>330	<b>27</b>	59	---
Tin	ppm	ASTM D5185(m)	>15	<b>&lt;1</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	---

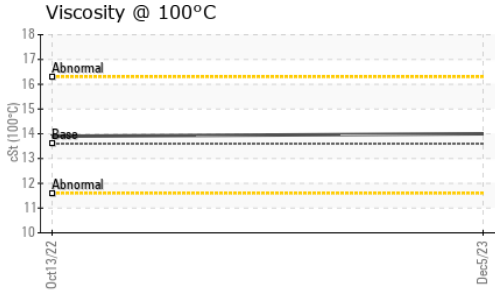
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	39	<b>42</b>	40	---
Barium	ppm	ASTM D5185(m)	1	<b>&lt;1</b>	<1	---
Molybdenum	ppm	ASTM D5185(m)	49	<b>46</b>	45	---
Manganese	ppm	ASTM D5185(m)	1	<b>0</b>	<1	---
Magnesium	ppm	ASTM D5185(m)	616	<b>792</b>	736	---
Calcium	ppm	ASTM D5185(m)	1554	<b>1182</b>	1424	---
Phosphorus	ppm	ASTM D5185(m)	899	<b>690</b>	808	---
Zinc	ppm	ASTM D5185(m)	1069	<b>811</b>	857	---
Sulfur	ppm	ASTM D5185(m)	2624	<b>1939</b>	2235	---
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	<b>10</b>	35	---
Sodium	ppm	ASTM D5185(m)		<b>3</b>	4	---
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	3	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>6	<b>0</b>	0	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>7.1</b>	7.5	---
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>19.9</b>	20.8	---



# OIL ANALYSIS REPORT

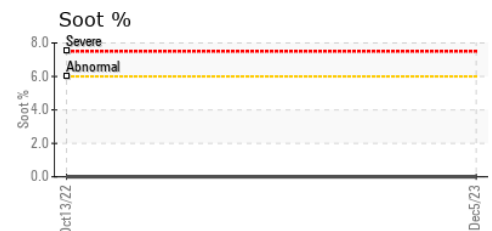
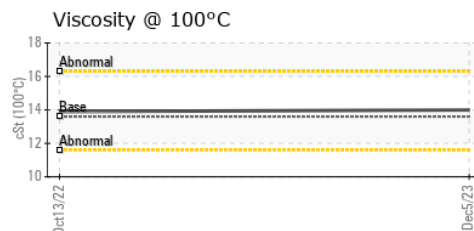
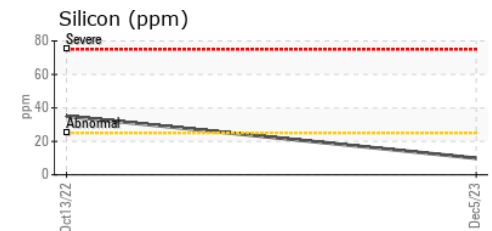
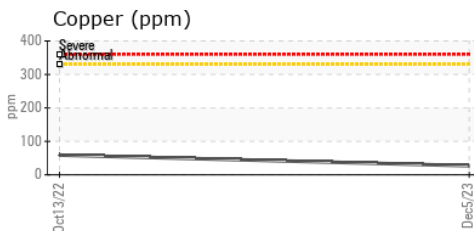
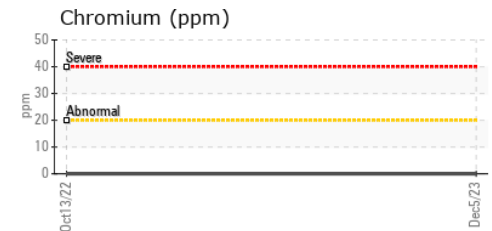
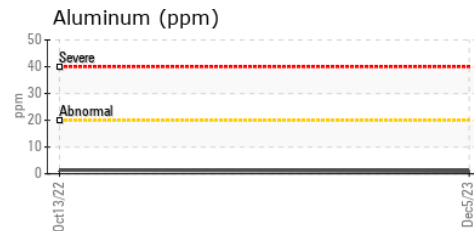
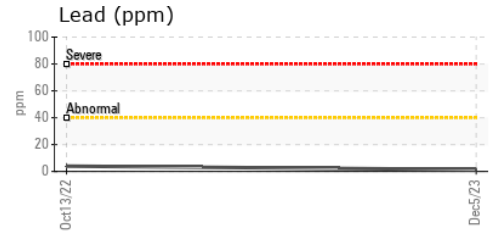
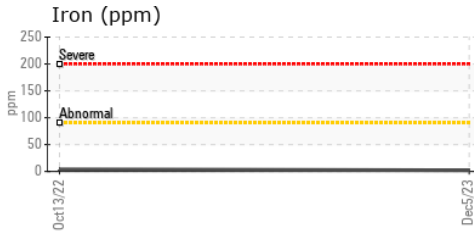


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>17.7</b>	18.3	---

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	---	---
Silt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Debris	scalar	Visual*	NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Appearance	scalar	Visual*	NORML	<b>NORML</b>	---	---
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	---
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 @ 100°C	cSt	ASTM D7279(m)	13.6	<b>14.0</b>	13.9	---

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **CUMMINS EASTERN CANADA INC.**  
**Sample No.** : CU0022609 **Received** : 06 Dec 2023 122 CLYDE AVENUE  
**Lab Number** : **02601124** **Diagnosed** : 06 Dec 2023 MOUNT PEARL, NL  
**Unique Number** : 5694209 **Diagnostician** : Wes Davis CA A1N 4S3  
**Test Package** : MOB 1 ( Additional Tests: Visual ) Contact: DARRYL CAREY

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.

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